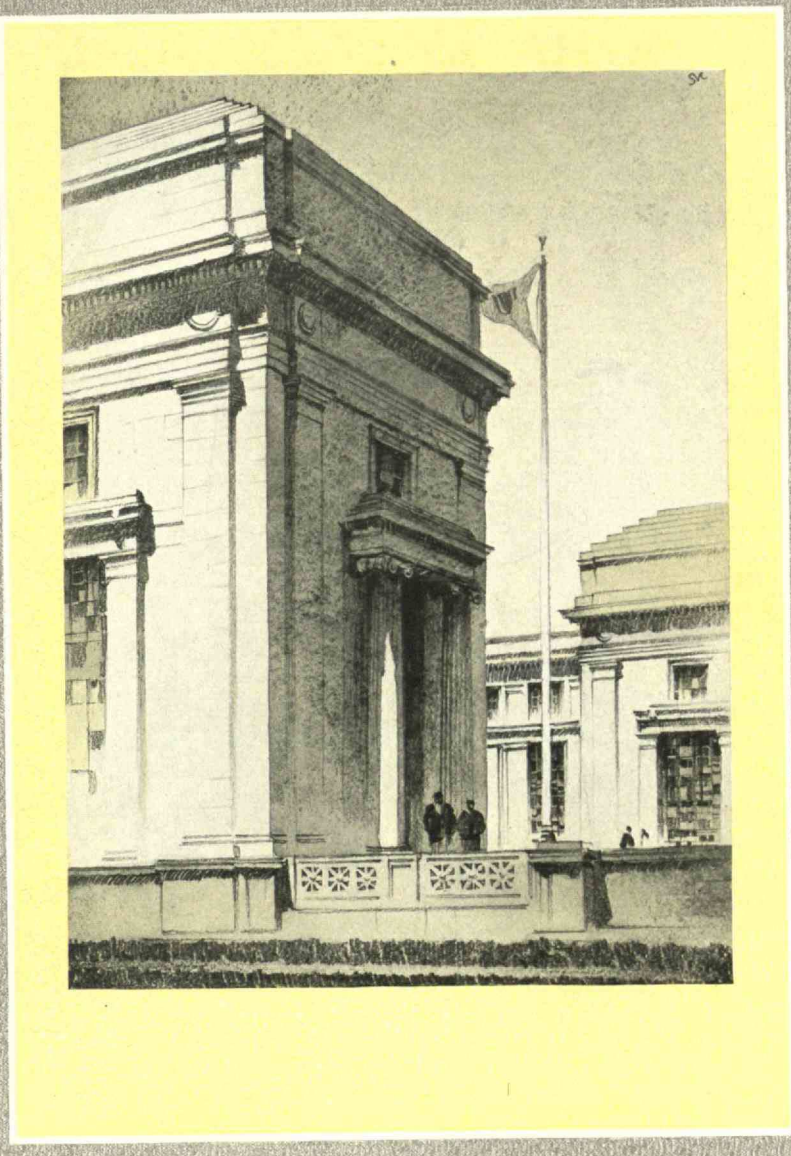
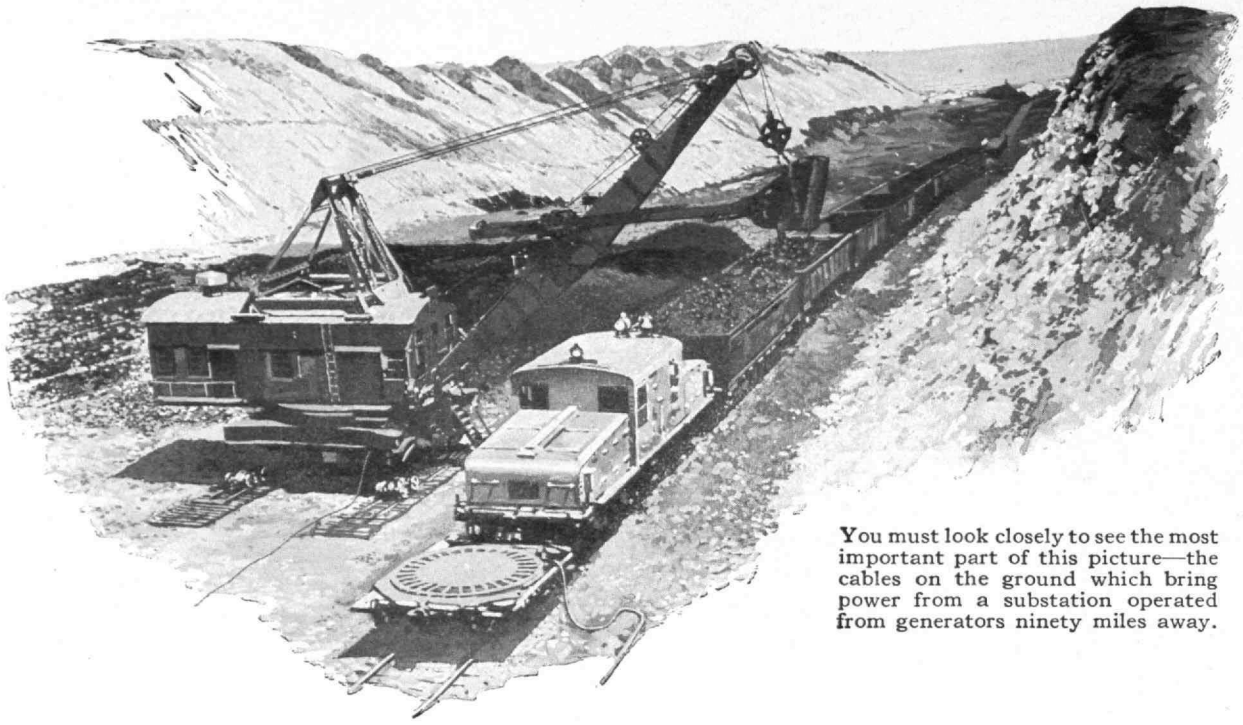
THE TECHNOLOGY REVIEW



FEBRUARY
1926

RELATING TO THE MASSACHUSETTS INSTITUTE OF TECHNOLOGY

technology
review
Published by MIT



You must look closely to see the most important part of this picture—the cables on the ground which bring power from a substation operated from generators ninety miles away.

Digging coal by wire

TO the Northern Pacific Railway belongs the credit for this thrifty achievement in supplying its own coal.

At Colstrip, Montana, the railroad owned a 180-acre bed of coal, lying almost on the surface—a cheap, convenient source of fuel for transcontinental trains.

But the mining of it offered peculiar problems. The water of the district was so alkaline it could not be used in steam engines. The coal slacked so quickly that it could not be stored.

A power line ninety miles long solved the difficulties. Electric shovels that require no water now strip the surface earth—tons at a time—mine the coal and load it. Giant storage battery locomotives of 60 tons capacity haul the loaded trains to the main line, for immediate use.

Industry after industry owes a similar debt to electricity. It is continually tapping natural resources that mankind could not otherwise have enjoyed for another hundred years.

To help industry and the railroad do their work more economically is an important service, but to save human energy is even more important. The General Electric Company designs and manufactures the equipment by which electricity does both.

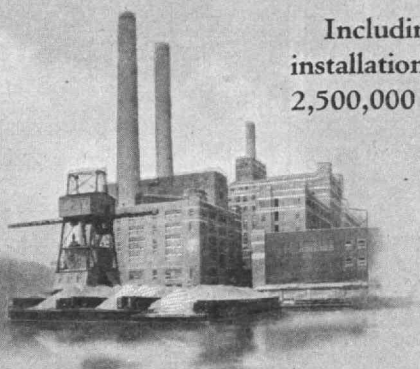
GENERAL ELECTRIC

BURNING ALL KINDS OF FUEL

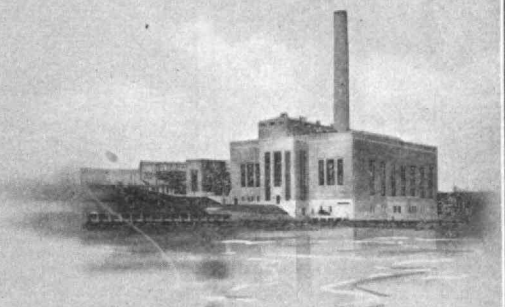
POWER stations making records for economy with all kinds of fuel are among recent Stone & Webster work. They include stations with stokers burning a wide range of coals, and stations burning pulverized fuel, oil, and natural gas. Some of the coal burning and some of the oil-burning stations are designed for changing at any time to pulverized fuel. Where gas is burned the stations permit changing to oil or pulverized fuel. This Stone & Webster experience covering conditions in all parts of the country and with all kinds of fuels is offered to those contemplating new plants or extensions.

Including the plants here shown, Stone & Webster installations for industry and the public utilities exceed 2,500,000 horse power.

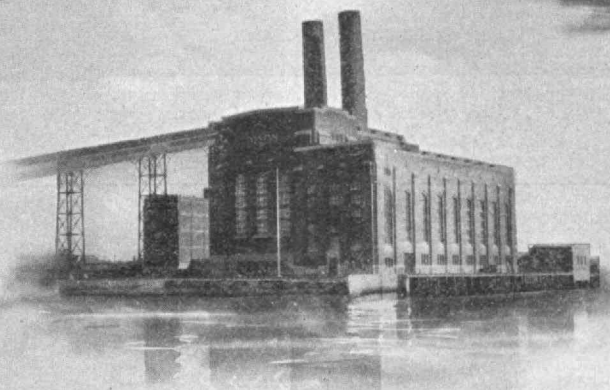
RIVER-DREDGED ANTHRACITE
American Sugar Refining Company, Baltimore, Md.



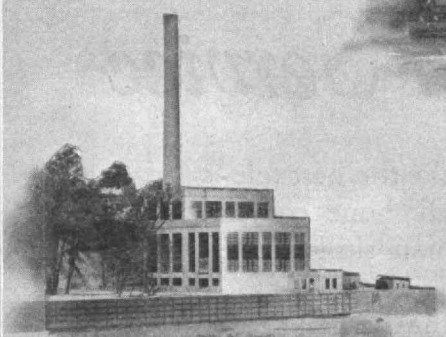
OIL
(or Pulverized Fuel)
Montaup Electric Company, Fall River, Mass.



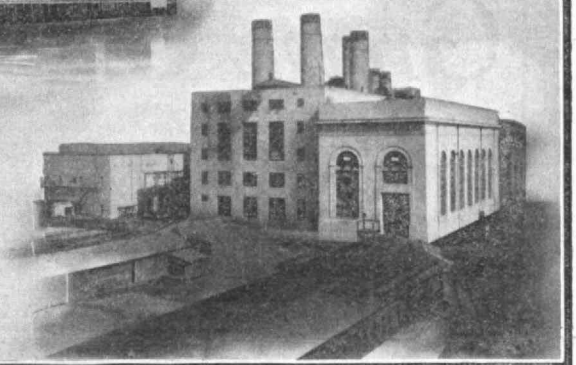
BITUMINOUS COAL
The Edison Electric Illuminating Co. of Boston,—Edgar Station.



PULVERIZED FUEL
Ford Motor Company, St. Paul, Minn.



NATURAL GAS (or Oil)
Southern California Edison Company, Los Angeles, Cal.—Long Beach Station.



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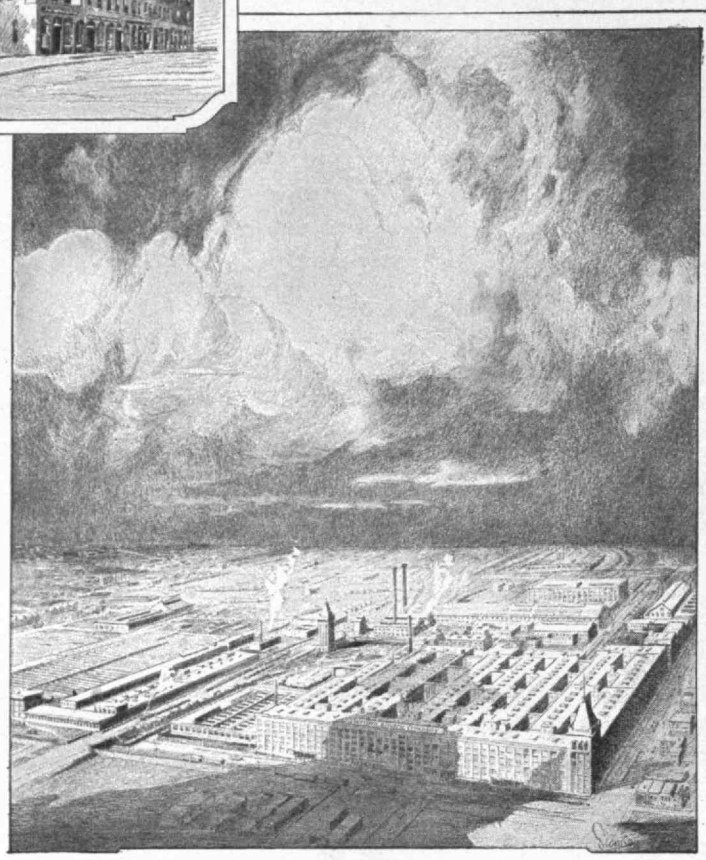
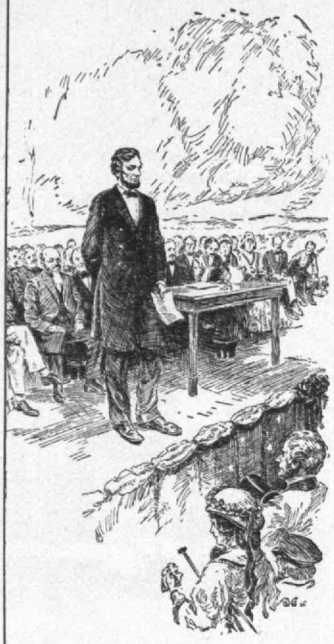
Western Electric in 1877



Part of the Western Electric of today. The great telephone factory at Chicago.



Grown Great Through Service

THE men of history grew great according to the measure of their service. So with institutions.

Western Electric is an industrial institution whose growth is no miracle, but the result of greater service. Nearly half a century ago it started on a simple idea—to make the best telephones and telephone equipment that human skill could build.

In our work for the Bell Telephone System, our ideals today are the same as those that have guided us for nearly fifty years—to grow greater by serving more.

Western Electric

SINCE 1882 MANUFACTURERS FOR THE BELL SYSTEM

THE TECHNOLOGY REVIEW

RELATING TO THE MASSACHUSETTS INSTITUTE OF TECHNOLOGY

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Contents for February, 1926

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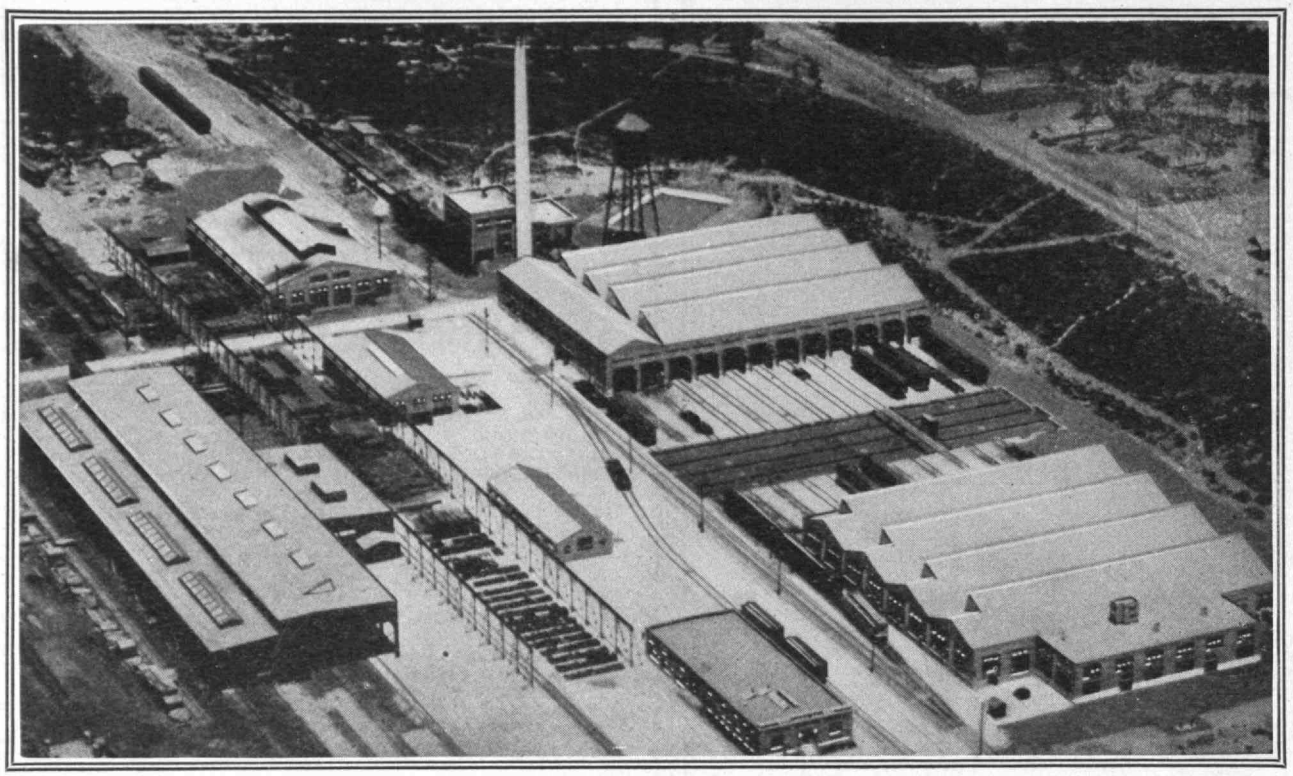

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The TECHNOLOGY REVIEW

RELATING TO THE MASSACHUSETTS INSTITUTE OF TECHNOLOGY

VOLUME XXVIII · · · FEBRUARY, 1926 · · · NUMBER 4

The Past Month

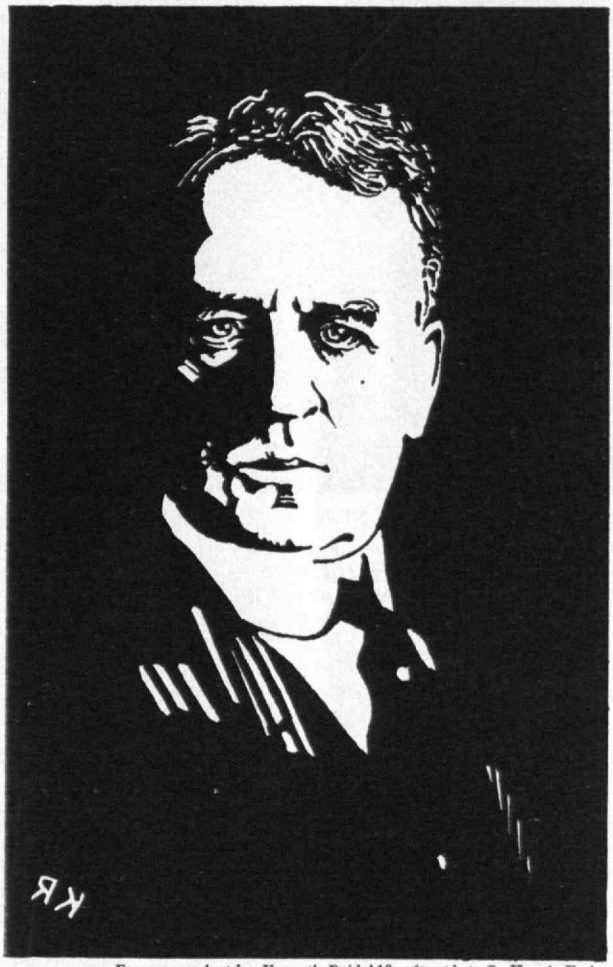
ELSEWHERE, in the lush prose to which our readers are well accustomed and have grown inured, a veteran reporter of Technology dinners in the Old Tradition, sets down his impressions of the evening of January 9, when the Alumni of the Institute sat down and broke bread in the festival which usually marks the first Saturday of the new year. There will be here, then, no attempt to expound, describe, explain. The perfect lily of a prose style as developed at Harvard College at the close of the First Decade, will receive no kalsomining touch from the copy desk.

But these limitations having been set in advance, it would be well, perhaps, that a less gifted mind set down a few minutiæ of the evening in plain black and white. If you find a fact here that is violently disputed elsewhere, it is not necessarily incorrect.

The Annual Dinner of the Alumni Association was held in the Great Dining Hall of the Boston Chamber of Commerce on Saturday evening, January 9, beginning at 7:00 P.M. Charles Hayden, '90, presided as Toastmaster. The speakers were Dr. Stratton, Dr. Charles H. Herty, President of the American Synthetic Organic Chemical Manufacturers' Association, and Dwight W. Morrow, of J. P. Morgan and Company.

There are the essentials. Now then, Professor Rogers, do your stuff. Gentlemen, page 205.

PRECEDENT was most spectacularly overturned on January 11 by the announcement that George Eastman would speak by radio from Rochester, during the course of the program of the Phantom Dinner held in New York at the Waldorf Astoria on January 19. Mr. Eastman, whose benefactions raised the Institute from a school hampered by poverty and inadequate housing to its present state, has never, even since he found it necessary to drop the veil of anonymity, permitted himself to appear in the personal life of the institution which he endowed. Despite all pleas, no public gathering of Technology has ever beheld him. This precedent, he will even now not break — but it will be equally novel that Institute Alumni will have the opportunity of listening to his voice, as they, and all radio listeners will now have the great opportunity of doing.



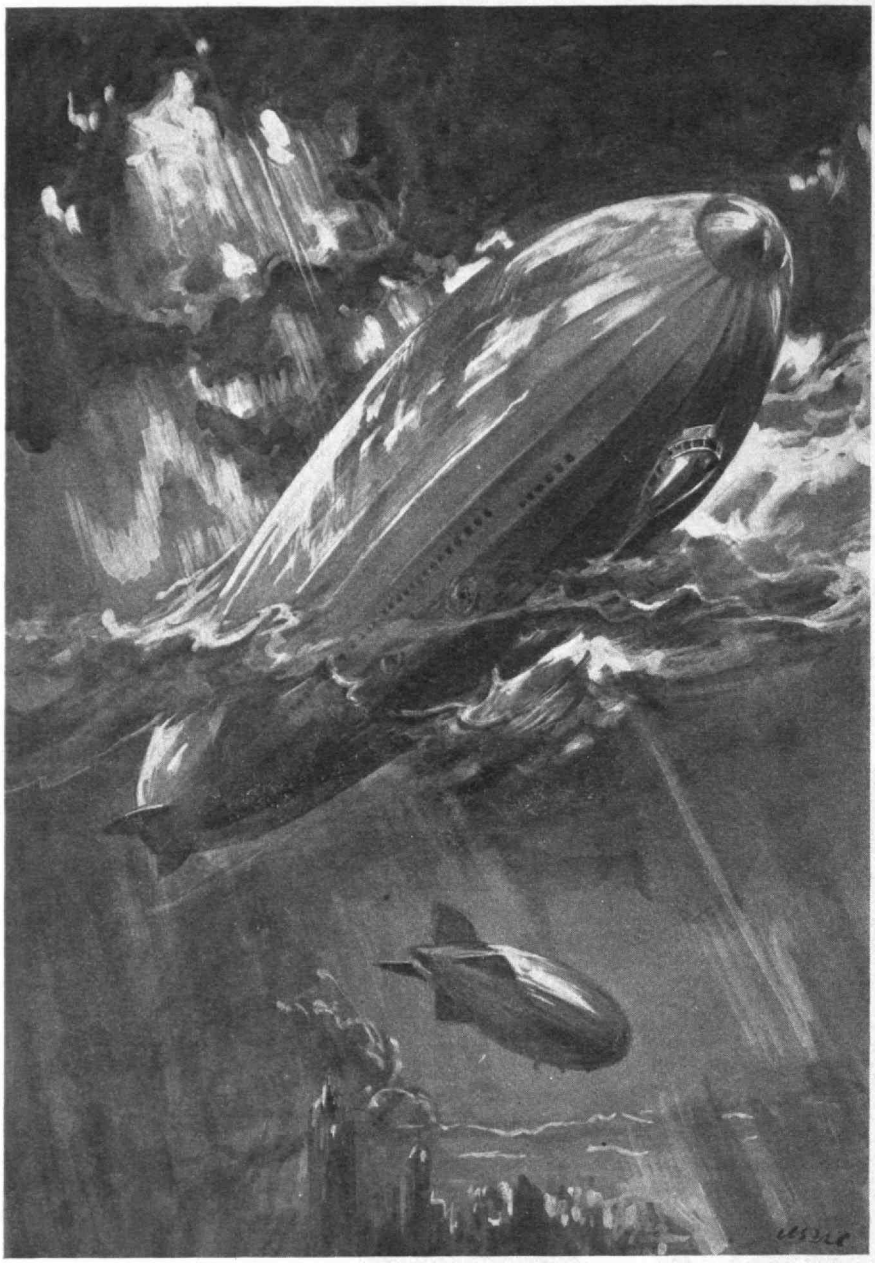
From a woodcut by Kenneth Reid, '18, after photo © Harris-Ewing

DWIGHT W. MORROW

Principal speaker at the Annual Dinner of the Alumni Association in the Chamber of Commerce Building on January 9. See the story on page 205

As these words are written, the evening is still in the future. The tense will shift just as The Review goes to press, and no detailed account of actual happenings can therefore appear until the publication of the March number. It may now be recorded, however, that several changes in program have occurred since last notice. The speaking list, in addition to Mr. Eastman, now includes Vice-President Dawes, General James G. Harbord, President of the Radio Corporation of America, and Dr. Stratton. The first two named will speak from Washington, and Dr. Stratton from Walker Memorial in Cambridge. The musical program of the evening will be varied, but of a quality to mix appropriately with the speeches. David Sarnoff, General Manager of the Radio Corporation, will act as Master of Ceremonies.

THE Phantom Dinner will by no means be Mr. Sarnoff's first association with Technology. Two years ago he was a speaker at the Radio Dinner



THE ARTIST'S CONCEPTION OF THE PROPOSED NEW SUPER-AIRSHIP

The proposed dirigible would be 850 feet long, 130 feet in diameter, and with a gas capacity of 6,500,000 cubic feet — about twice the size of the Los Angeles. *It could carry one hundred passengers and crew, or in war could fly with twenty combat airplanes aboard. With eight motors it would have a cruising range of more than 8,000 miles. It is estimated the construction cost of the ship would be about $1 a cubic foot in Germany, but more in this country. The motor gondolas and observation posts are to be inside the ship, an innovation in the building of dirigibles. The drawing by Oscar Cesare is reproduced by courtesy of* The World's Work. *See page 193*

held in New York on March 7, 1924. (The Technology Review, Vol. XXVI, page 317.) Earlier than this, however, go his Technology traditions. When the S. S. *Bunker Hill* weighed anchor at a North River pier on June 13, 1916, at the beginning of its memorable argosy, which ended with a welcome in Boston Harbor surpassed only when the 26th Division returned from France, David Sarnoff was the "sparks" of the vessel. He it was who sent by "wireless" (the term "radio" was then unfamiliar) to the office of *The Tech*, an account of the voyage written by the present Editor of The Review, then General Manager of the undergraduate publication. Candor compels the admission that although Mr. Sarnoff's voice will be heard at the phantom dinner by well over 50,000,000 people, he found it a hard job to get his dots and dashes through from Long Island Sound to the little Marconi station atop Filene's less than ten years ago. Such is progress.

THOMAS C. DESMOND, '09, President of the Technology Club of New York, at its meeting on December 21, presented to the Alumni Council, with considerable verve, and unbounded enthusiasm, the details of his plan to establish in New York City a "National Technology Center." Following his preliminary announcement at the November meeting, Mr. Desmond entered into a detailed discussion of the idea, and was warmly seconded by James P. Munroe, '82. The Council went on record with the vote that it favored the plan in principle, and empowered the chair to appoint a committee of three to act jointly with the Corporation in the consideration of the proposal, should the Corporation desire the coöperation.

"Technology is in a position to establish such a headquarters" said Mr. Desmond, "and it may have to do so if it is to maintain its preëminent position in the field of technical education."

We quote an excerpt from the Secretary's transcript of Mr. Desmond's remarks.

"Mr. Desmond developed his plan along somewhat different lines than those he previously outlined and it is his belief now that a 25-story office and club building in the 42nd Street district of New York, constructed primarily for business purposes, would provide a center for a national headquarters for Technology and meet the need of having a suitable place for Technology men to gather in an adequate building of their own when in New York City. Such a building would have a great advertising value for Technology, containing as it would an office and conference rooms for the President and members of the Corporation, quarters for members of the Faculty engaged in consulting work, personnel service of an advanced type, New York headquarters for a large part of the work of the Alumni Association, and eventually club accommodations. Further, it can be a commercial success by renting office space largely to Tech engineers

who would welcome the opportunity to have their business home in such a Technology building.

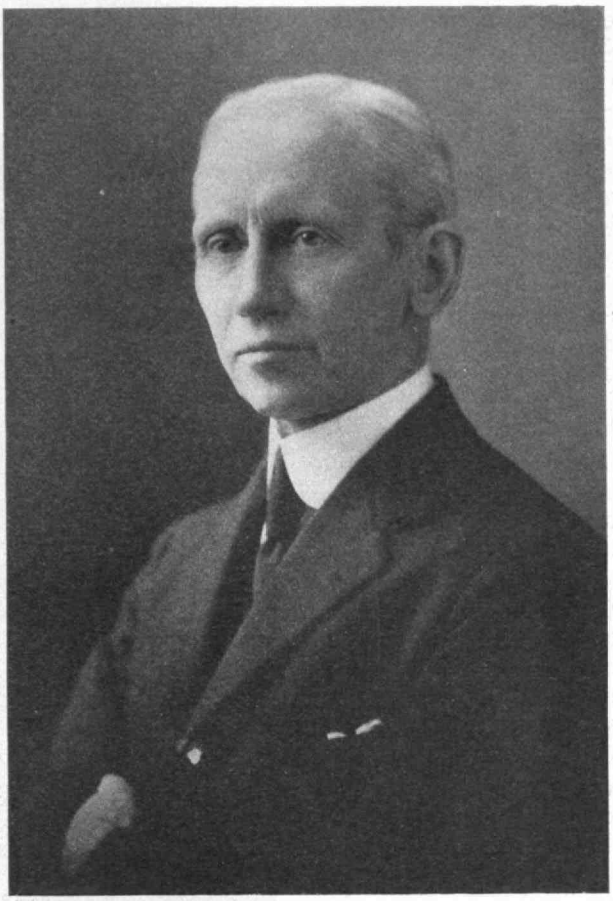
"Mr. Desmond emphasized the fact that this is not primarily a plea for a new home for the Technology Club of New York, but rather, an attempt to meet the demand of Alumni in all parts of the country for a suitable meeting place for business transactions and consulting work when in New York, and New York is proposed simply because it is the nation's metropolis, on account of its geographical situation, and the contacts with business and industry it offers the engineering profession. He said he had in mind a structure as different from existing college clubs in New York as the Institute is different from other educational institutions.

"He said he was most anxious to secure the cordial support and interest of the Alumni in Boston, but that it was not necessary at the start to move any of the present activities of the Institute or the Alumni Association to New York unless desired. He does, however, want the Institute to recognize the necessity of keeping in touch with business interests and to do all in its power to hold the interest and support of its Alumni, not only by an adequate employment service, but through extension work to be carried out by regular visits by Technology professors to this national headquarters.

Courtesy of The World's Work

PAUL W. LITCHFIELD, '96

First Vice-President of the Goodyear Tire and Rubber Company, and Vice-President and General Manager of the Goodyear-Zeppelin Corporation. For sixteen years he has directed the construction of lighter-than-air craft at the Goodyear factory. *See the story on page 193*



WILLIAM HOVGAARD

Professor of Naval Design and Construction at the Institute who presented to the Naval Court of Inquiry a lengthy technical report on the causes of the Shenandoah *disaster on September 3 last year*

"On the social side this proposed building allows for club facilities which can be changed in size and accommodations as the interest demands. Such club facilities should be open to all Tech men simply with payment for services rendered or value received.

"Mr. Desmond said that it was his idea to have the equity in such a large building presented to the Institute and he added that the financing of the building seemed to him reasonably simple if the Alumni and Corporation really want it and its usefulness is demonstrated. He predicted that if this plan meets with the approval of the Alumni and the Institute authorizes a national headquarters building, regional headquarters in Chicago and cities further west would eventually follow."

SHE, the *Shenandoah*, was wrecked on September 3 last year. Four months later, lacking but a day, the report of the Naval Court of Inquiry, Rear-Admiral Hilary P. Jones presiding (Captain L. B. McBride, C.C. U.S.N., S.M. '04, was a member), was made public. The report evoked considerable comment in the press and some criticism. It said the disaster was due primarily to a violent upward gust which struck the ship under the bow and caused the upper girders to break at about one-third of the length of the ship from the nose. There may have been other contributory causes of secondary importance, but it was found impossible

to determine definitely the exact combination of forces. No blame was attached in any way to the design and construction of the ship, or to the operating personnel.

So far as the lessons to be learned for future guidance are concerned, the most significant contribution seems to have been made by a member of the Technology Faculty. The Court gave quasi-endorsement to his views in Opinion 35 of its report: "The Court is of the opinion that the recommendations of Professor William Hovgaard, technical adviser to the Judge-Advocate, in his technical analysis of the evidence, and of Lieutenant-Commander Rosenthal, senior surviving officer of the *Shenandoah*, in his summing up the case on behalf of the survivors, both of which recommendations deal with future development of rigid airships, are worthy of the most careful consideration."

NORBERT WIENER

Assistant Professor of Mathematics at the Institute who goes on leave of absence for a year beginning in March to act as exchange Professor to the University of Göttingen

Professor Hovgaard recommended:

1. Airships to be constructed with a smaller ratio of length to diameter to be better able to resist aërodynamic forces and to reduce the resistance to propulsion. [See The Technology Review, Vol. XXVIII, page 17].

2. Control car to be built in one with the keel structure and close up to the keel, thus avoiding danger of tearing loose and reducing air resistance.

3. Possibility of placing all the engines inside the ship and use of only two propellers aft as in a submarine to be studied. This would eliminate the power cars, reduce the air resistance and increase the efficiency of the propellers. Such an arrangement would be facilitated by the adoption of a more full form of the ship.

4. Speed to be increased to make ship more independent of air currents.

5. Study of possibility of changing girder design to give greater strength on the same weight.

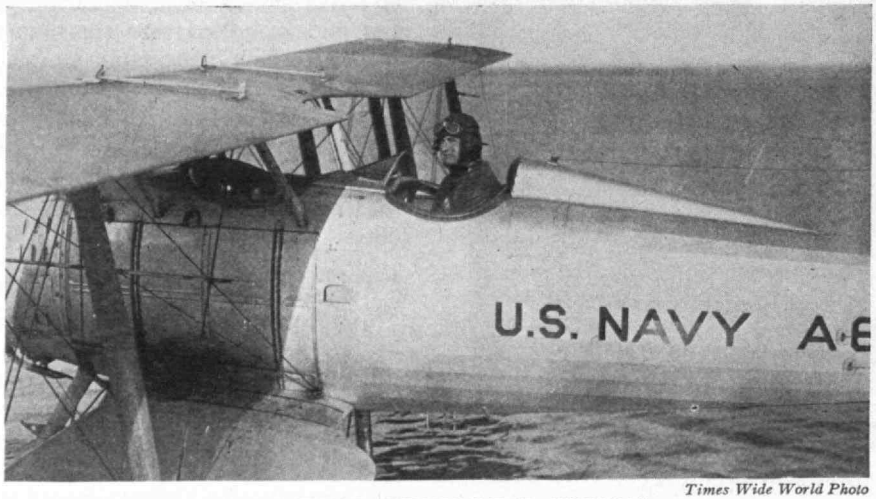
6. Arrangements of automatic and hand valves to be kept substantially as originally designed for *Shenandoah*, providing an automatic valve for practically every cell so as to eliminate as far as possible the human element in the functioning of the valves.

7. Ships of larger size, about 5,000,000 cubic feet, to be built for military and long distance commercial work, but a ship of smaller size of about 1,000,000 cubic feet to be built at the earliest possible date for experiment and training.

8. Additional mooring masts and other facilities be made available for ever extending fields of operation.

9. Adequate weather service for aviation to be provided within the intended fields of operation.

10. In the further development and operation of airships a systematic policy should be followed: At first, research work and the requirements of the designers should be considered of primary importance. Next, greatest weight should be given to a systematic and continuous training of the personnel. Gradually, as the material and personnel is perfected, strictly military or naval duties can be taken up. The area of operation should be systematically extended gradually as adequate mooring facilities and a satisfactory weather service are established.



Times Wide World Photo

LIEUTENANT REGINALD D. THOMAS

Commander of the Naval Air Station at Squantum has been assigned to the Institute in charge of a course in Naval Aviation which will lead to the commission of Ensign in the Naval Reserve. Lieutenant Thomas holds the distinction of having recently completed a tally of 700.5 hours of flying and a record of 98,000 miles in the air within the space of one year

Summing up, the best policy seems to be a vigorous research and development work, and a careful systematic training carried out continuously with a fairly permanent personnel, followed by gradual progress in operation as allowed by the extension of the accessory services.

IF nothing else were accomplished by the Naval Court of Inquiry on the *Shenandoah*, the Mitchell court-martial and the investigation headed by Dwight W. Morrow, there has resulted an awakening of general interest in the future of the United States in commercial and military aviation. Public opinion has been shocked, bewildered and to a large extent unappeased by the testimony. Others than witnesses have had something to say about the subject and fortunately two articles, both by Technology alumni, have appeared and each seems outstanding in its contribution to the layman's fund of available information.

"Flyers and Storms" by Captain Conrad Westervelt, C.C., U.S.N., S.M., '08, in *The Saturday Evening Post* for December 5, 1925, describes the uncertain weather conditions which are met with in air navigation. He declares that there are certain "concentrated forces of Nature which are so powerful that it is most improbable that man-made structures of the type of the *Shenandoah* can ever be built to resist them. The only real defense lies in keeping out of such disturbances."

Paul W. Litchfield, '96, is more optimistic in *The World's Work* for January in which he sets forth "The Case for the Super-Dirigible." He says: "The problem of stresses, *i. e.*, structural safety, has been solved. Any one who says that airships cannot be built to meet any strain that can be imposed on them while in their element, the air, is speaking with scant engineering knowledge. They can be made strong enough to withstand any storm, though I would not go so far as state that they can be made fool-proof. The human being can destroy anything that he may set up, whether it be an airship or a motor car. . . . We know more about storms today than did the early operators. . . . Rain is no menace. Neither is fog nor mist. . . . Snow and sleet create a problem for the designer. . . . No rigid airship has been destroyed by lightning, though many have been struck, among them the German *L–10*. . . . The fire hazard, for Americans, at least, has been eliminated by helium gas."

Mr. Litchfield is Vice-President of the Goodyear Zeppelin Corporation and in its Akron plant a group of German designers and executives who built nearly all of the Zeppelins, including the *Los Angeles*, have been working for the past year with American colleagues to perfect the design of a truly modern airship. The proposed dirigible is to be about twice the size of the *Los Angeles* — 850 feet long, 130 feet in diameter, gas capacity about 6,500,000 cubic feet. Ships like this one will be able to "carry about 100 passengers, baggage, fuel, supplies for the crew, and auxiliary apparatus for 8,000 miles of flying at seventy-five miles an hour. . . . They could leave New York on Saturday morning, arrive in London early Monday morning; and leaving Friday could be back in New York the following Monday morning, even against headwinds. Those who have studied the subject thoroughly know that they can be operated at a profit, providing that the same amount of Federal support is afforded the dirigible as is granted to surface craft."

Although Captain Westervelt and Mr. Litchfield might seem to be flatly contradicting each other, such is not the case. The former advocates avoiding storms and the latter, while he has no objection to such procedure wherever possible, believes that perfection of design can eliminate much of the hazard except that caused by the human factor. Neither is widely at variance with the statement of Professor E. P. Warner, S.M., '17, when he said in his article, "Some Reflections on the *Shenandoah* Disaster," in The Review last November: "It will not always be possible to dodge disturbances, however, and dodging them must be a matter of convenience and expediency rather than of vital necessity. . . . September's tragedy makes it even clearer than it was before that engineers now have insufficient data on the nature of the cosmic forces with which they must contend. The key to future progress lies in further research."

Underwood Photo

MISS FU LI KUAN, '27

This young lady from Canton holds the distinction of being the first Chinese Co-ed ever to enter the Institute

TRANS-ATLANTIC radio transmission of photographs was accomplished for the first time little more than a year ago and because the feat was made possible through apparatus designed by Richard H. Ranger, '11, it was duly chronicled in The Review of January 1925. Within the intervening year the science of radio transmission has gone forward with giant strides, albeit with almost silent tread.

Just how much has been accomplished in such a short space of time was revealed when Professor Edward L.

Bowles, S.M. '22, delivered the second lecture in the Popular Science series given under the auspices of the Society of Arts. He was speaking on "Recent Developments in Radio" on Sunday, January 17, when he showed a photograph of a radio motion picture projector receiving from the air the moving silhouette image of a child dancing. And then it was that most of the audience knew for the first time that radio transmission of moving pictures in silhouette is an accomplished fact and that radio reception of regulation moving pictures in our homes may be expected soon. The apparatus used in transmitting moving pictures through the air operates on the same principles used in transmitting inanimate images. The receiver shown by Professor Bowles is not unlike a camera and is smaller than most radio receivers.

In perfecting the process of transmitting moving pictures, which requires the reproduction of all light and shade values, it will be necessary to increase the speed of transmission to the point where a single photograph can be transmitted in a sixteenth of a second, the rate necessary to produce the illusion of continuous motion. When this has been accomplished we will be able to sit in our homes and through receiving projectors draw from the air motion pictures as we now see them on the screen.

Radio transmission of images in black and white such as sketches, maps, cartoons, letters and engineers' plans has already been developed commercially and in process there is hope for great development in a broad field of usefulness.

Another important recent development in radio science was revealed when Professor Bowles demonstrated an oscillator employing a quartz crystal for measuring radio frequencies in connection with various types of audio frequency oscillators from which the variable frequencies were made visible by a cathode ray oscillograph.

The possibilities of remote radio control, which in the future may be applied to airplanes and ships, was shown in a series of experiments in which James K. Clapp, '23, used a portable transmitting station to operate miniature locomotives, motors, bells and other apparatus. And it was shown that all controlled devices could be operated in any sequence or combination desired.

All these accomplishments cause one to ponder over what another year may bring forth.

RECRIMINATION

Hot resentment between The Tech *and* VooDoo *burst into flame on January 11, when the undergraduate newspaper scooped the comic on a series of charges which the comic brought against it. Charges and counter charges have flown thickly. The lie has been given direct — on both sides.* *See the story on page 204*

WILLIAM H. BASSETT, '91, James Douglas Medalist, the "pioneer metallurgist of the brass industry," Technical Superintendent and Metallurgist of the American Brass Company, delivered the third Aldred Lecture of 1925–26 on January 6, when he chose as his subject "The Trained Man in Industry."

Some fifty years ago, he said, the trained man was practically unknown in the manufacturing world. Early workers in the field did not understand industry and in turn their potential value was not recognized. It was the organization of the electrical industry, Mr. Bassett believed, which, in its requirements for a more complete and technical knowledge of the subject, opened a new field for technical experts.

Even in this day when industry almost without exception recognizes the value of technical training, young engineers often miss their opportunities. It is often beneficial to consider all departments in seeking the work for which each man has a special talent. Technical men must know the language of those with whom they deal. In this connection a course in psychology is of great value in a training for the understanding of human nature.

WILLIAM OTIS CROSBY, '76, seventh oldest graduate of the Institute and a member of the Faculty in the Department of Mining, Metallurgy and Geology from 1875 until his retirement in 1910,

died at his home in Boston on the last day of the year.

Professor Crosby had attained an international reputation as a geologist and had carried out engineering projects in this country, Canada and Europe. It was upon his recommendation that the government constructed the great dam at Muscle Shoals. He was at one time consulting geologist to the Board of Water Supply of New York and directed construction of the Hudson River siphon deep beneath the river bed. He it was who carried out the preliminary investigation that led to construction at Wachusett of a dam and reservoir for the Metropolitan Water Board of Massachusetts.

He also was consulting geologist in connection with construction of the Boston tunnels and subways and the dam which forms the Charles River Basin. Again he was called as an expert to advise in the construction of the great drydock in South Boston, the largest of its kind in the country. As consulting geologist to the Carnegie Foundation, Professor Crosby carried on valuable research work, and was special geologist for the United States and the New York State Geological Surveys, and the United States Reclamation Service.

Professor Crosby was a Fellow of the American Academy of Arts and Sciences, the American Association for the Advancement of Science, the Geological Society of America and the Seismographical Society of America. He was a member of the American Institute of Mining and Metallurgical Engineers, the Economic Geologists, the Boston Society of Natural History and the Appalachian Club.

LENINGRAD'S newly founded Ore Dressing Institute has placed an autographed photograph of Professor Emeritus Robert H. Richards, '68, in its assembly hall. The letter requesting this honor from Dr. Richards said: "Professor Andreef and other members of the faculty, being experts in ore dressing problems, have profound interest and admiration for your fundamental works and desire to place your portrait in the Assembly Hall of this Institute."

At about the same time he was also notified of his reëlection as an honorary member of the Chemical, Metallurgical and Mining Society of South Africa, (one of the oldest scientific bodies south of the Equator), to which position he had first been chosen three years ago, as reported in The Review for December 1922. This latest election took place last summer at the Scientific and Technical Club in Johannesburg, Transvaal.

EUROPE and America are again exchanging professors, truly a most encouraging sign to those who, quick to rise above prejudices engendered by the war, are striving for the advancement of scientific knowledge throughout the world.

In November The Review announced the coming of Professor Th. de Donder of the University of Brussels, and Professor Max Born of the University of Göttingen to the Institute. Now from Göttingen comes an invitation to Dr. Norbert Wiener, Assistant Professor of Mathematics at Technology, to give a series of lectures there next summer and autumn.

Dr. Wiener has been granted a year's leave of absence and sails for Europe early in March. He expects to return early in February 1927. In addition to lecturing at Göttingen he plans to carry out special investigations with eminent European mathematicians, who have sought his collaboration. At Göttingen Dr. Wiener will lecture on the "Harmonic Analysis of Periodic and Non-Periodic Processes", a subject on which he is a recognized authority.

Discussing his plans, Dr. Wiener expressed much satisfaction over the cordial welcome from European scholars, who, upon hearing of his forthcoming visit, have written to assure him of their eagerness to coöperate in bringing about closer scientific relations between their countries and the United States.

TIRE manufacturers, now perturbed over the British monopoly of the world's supply of rubber as planned by Lord Stevenson, should take heart from the prediction of Professor James F. Norris of the Department of Chemistry, who in an address before the first national symposium on organic chemistry at Rochester, N. Y., on December 29, pointed to petroleum as a possible source of synthetic rubber.

Professor Norris, who was recently reëlected President of the American Chemical Society, was speaking of the value of petroleum as a national resource from which, in addition to the products now manufactured, may come still others such as new fats and oils and rubber. Recalling that the coal tar industry and its various branches originated in Germany, Dr. Norris pointed out that America, with her vast oil resources, has an equal opportunity for developing new products. Beyond the horizon of oil as a fuel and lubricant, Dr. Norris visioned a greater industry.

The establishment by John D. Rockefeller, Jr., of a fund of $250,000 for research in the chemistry of petroleum, Dr. Norris said, is believed to mark the beginning of general recognition of the possibilities that lie in such an investigation.

From another Technology man, Earl P. Stevenson, '19 (not to be confused with Lord Stevenson), Vice-President of Arthur D. Little, Inc., speaking at Kansas City before the American Association for the Advancement of Science, came a similar prediction that from petroleum will come rubber. The petroleum industry, an Associated Press despatch quotes him as saying, spends nearly $9,000,000 a year to dispose of chemicals which might produce rubber worth $162,000,000. The United States, he pointed out, uses seventy per cent of the world's rubber production for which it pays nearly a billion dollars.

All this conjures up the amazing picture of automobiles of the future running on tires made from the very source of their present power. And that brings up the question as to the future of fuel. The answer came from Dr. Norris who told members of the organic chemical symposium that the future of motor vehicles rests upon the synthetic production of methyl alcohol, general manufacture of which, he added, would insure an unlimited supply.

At the Annual Dinner of the Alumni Association Dr. Charles H. Herty spoke on topics markedly similar.

MUCH is being heard of the chemists recently and a record of the events of the past month would not be complete without recording the election of Hugh Kelsea Moore, '97, Perkin Medalist of 1925, as President of the American Institute of Chemical Engineers at the annual convention at Cincinnati in December.

Dr. Moore is Director of Research for the Brown Company of Berlin, N. H. After studying at the Institute from 1893 to 1896 he joined the Electro-Chemical Company of Rumford, Maine, and later the Moore Electro-Chemical Company and the American Electro-Chemical Company. In 1923 the American Institute of Chemical Engineers awarded him the Gold Medal for the best contribution in applied science since 1913.

DR. SAMUEL C. LIND, '02, Associate Director of the United States Fixed Nitrogen Research Laboratory, was awarded the Nichols Medal in chemistry for 1925 by the New York Section of the American Chemical Society at its meeting on January 9. The medal was bestowed "for research published during the current year, which in the opinion of the jury is most original and stimulative to further research." It specifically recognized Dr. Lind's work on the "chemical activation of alpha particles."

The award of this medal, established by Dr. William H. Nichols, a charter member (and the only American honorary member) of the American Chemical Society, comes as a public recognition of its recipient's research in the field of carnotite deposits, the source of the world's radium supply. Dr. Lind graduated from Washington and Lee University in 1899, from Technology's Department of Chemistry in 1902 and in 1905 received the degree of Ph.D. from the University of Leipzig, after which he studied at the University of Paris and the Institute of Radium Research in Vienna.

THIRTY lines in the January Review attracted the attention of the Associated Press. Mail to The Review Office and Professor J. W. M. Bunker became abnormal. Reporters sought interviews, manufacturers of various foods and articles telegraphed and sent representatives, baking corporations became curious, hospitals wanted information, candy makers became excited, even a photographic chemist asked for samples in the hope that it might mean the solution of the color photography problem.

To all Professor Bunker made courteous reply, explained how the new substance, developed from the globulin and albumen content of beef serum, "proco," a powder of golden color high in protein value, could be used as a substitute for the whites of eggs. And as Exhibit A he offered to one and all, a cake, fresh, edible, baked with this new substance. Then news that a poultry raiser in using one of the by-products of the protein food containing iron found that by feeding it to his flock he reduced deaths by fifteen per cent and increased egg production to a marked degree.

Came press cuttings, which showed that from reading the Associated Press factual report, certain headline writers had interpreted "white of egg substitute" to mean "synthetic eggs." Some had gone further and outlined extended research but in spite of, or possibly because of, their speculative philosophies, Professor Bunker does not contemplate the early development of their desired "synthetic hen."

AS if the stuff that is supposed to cheer in this prohibition age were not already full of deadly risks, Herman C. Lythgoe, '96, Head of the Division of Food and Drugs of the Massachusetts Department of Health, has discovered that much of the distilled liquor sold in the Commonwealth contains copper.

What is more terrifying than that announcement in unadorned English, is the declaration that those who imbibe copper-tainted beverages are likely to suffer from haemochromatosis.

This most disquieting news came at the 207th meeting of the Northeastern Section of the American Chemical Society at Walker Memorial on January 8, when Mr. Lythgoe read a paper, prepared with the aid of two of his assistants, on "Copper Content of Distilled Liquor Sold in Massachusetts."

Utterly disregarding the possibility of ruining the business of those Massachusetts gentlemen who choose to worm their way to riches, Mr. Lythgoe said in part:

"Since the coming of prohibition, liquor analysis in our laboratory for the police departments has increased steadily, averaging now about 9,000 samples a year. In 1544 samples, examined for copper, 163 were positive.

THE Institute is to receive the sum of $25,000 under the will of Kenneth Wood, '94, who died on September 22 at his home in Pawtucket, R. I. Disposition of the bequest is left to the discretion of the administration of the Institute for "general uses and purposes."

After graduating from the Department of Mechanical Engineering in 1894, Mr. Wood took a position in one of the Sayles Finishing plants of which he was treasurer and director at the time of his death. He also was a director of the Rhode Island Hospital Trust Company; Chase National Bank of New York; Wauregan Company of Connecticut, Hamlet Textile Company; Moshassuck Valley Railroad; American Bleached Goods Company of New York and various other companies.

ORVILLE B. DENISON, '11, Secretary-Treasurer of the Alumni Association, leaves Boston on February 7 for a Marco Polo tour of Technology Clubs that will take him from Jacksonville, Florida in the Southeast to the Northwest of Portland, Oregon. Between the two extremes are many way stations and according to Mr. Denison's schedule he will travel as a local, stopping at seventeen cities in the southern and western sections of the country.

He expects to be in Jacksonville on February 10 and 11, and is scheduled to arrive in Los Angeles on February 26. San Francisco will be the next stop and from there he will head north, swinging eastward from Seattle for visits in cities of Montana, Utah, Colorado, Missouri and Tennessee. On March 28 he should be in Cambridge again.

An Aëronautical Engineer Abroad

Views on many more phenomena in Europe than those to be seen merely from the air

By EDWARD P. WARNER, S.M. '17
Professor of Aëronautical Engineering

THE late Richard Harding Davis once managed to extract from an ordinary pullman car journey between New York and Philadelphia enough novelties to round out a special article. Few of us are so gifted, and any one who ventures to write an account of travels through Western Europe in this generation should inaugurate the undertaking with an apology for his temerity. The Department of Commerce affirms that 305,000 Americans left these shores in the first ten months of the year. In April, 1925, it seemed easier to find people who were about to start for Europe than to locate any who were not, and in the face of that tidal wave of Americans that inundated Paris it would seem that what used to be magniloquently described as the Grand Tour would have as little of novelty to offer now as a trip on the Twentieth Century Limited.

Taken by itself, 1925 in Europe would perhaps present no very striking high lights. Seen with the bird's-eye effect resulting from a rather hasty trip through many countries and judged in comparison with the same ground as surveyed in other hurried visits of the last five years, 1925 in Europe offered such interest as to leave one filled with regret that the stay must be so short and the inquiry into the state of the land so superficial. England overlaid with economic gloom, France vaguely questing a new orientation of fiscal policy, Germany resurgent after the debacle of depreciation, France complaining that the franc goes down and Denmark that the crown goes up; present comparisons and contrasts stand out more intensely when ranked with the comparisons and contrasts of two years ago or of five.

Photo by the author

FAR-FLUNG CELLULOID

Harold Lloyd, Mack Sennett and Baby Peggy flourish no less in Copenhagen. Here they are, at the Fenway of the metropolis

I

From Montreal to the straits of Belle Isle forms a pleasing prelude to the entry into the open Atlantic. It gives some of the passengers their first sight of an iceberg, likely to prove a somewhat disappointing spectacle, and the fact that it is possible to read on deck at eleven in the evening and the knowledge that the steamer's great circle track brings it within 500 miles of Greenland gives to the novice a sort of vicarious thrill of Arctic exploration. In the main, however, it is like other ocean voyages, and like many another passage started in all the seven seas it ends alongside the Prince of Wales dock in the Mersey.

The introduction to British economics, vintage of 1925, came promptly, when a moving picture camera in my baggage was hailed as subject to recently imposed duties and a deposit of one-fourth the value of the instrument was exacted. That in itself was a normal enough phase of custom house procedure, but it seemed to pass the bounds of normality when it took an hour of continuous argument to persuade the inspector that it would not be essential to seal up the camera to prevent its use, with any breaking of the seal entailing the forfeiture of the deposit.

The incident would be unworthy of recounting did it not illustrate a new attitude towards foreign competition in trade which seems the most interesting thing in Great Britain at the present time. Almost for the first time Britain admits the impossibility of meeting foreign competition at home and abroad with no favors asked.

The first way of escape from such competition is through our own route, the tariff, but the McKenna duties alone have not sufficed. The second alternative involves the control of trade through sentiment. It was of such an attempt that the great British Empire exhibition at Wembley was the symbol and the type. It was an attempt which finds its expression in the slogan "Buy British Goods," — not necessarily because they are cheaper, not necessarily because they are better, but

because they are British, and Britain has a million unemployed, of whom a large proportion are "on the dole."

If the Wembley exposition and the subsidy to the coal industry are the two outstanding features of the British reaction to the current economic situation, the American automobile is the symbol of the menace that confronts the industrial heart of the empire. Even leaving the ubiquitous Ford out of consideration, the products of Detroit are everywhere, and the imposition of thirty-three per cent duty has but slowed the rising of the tide. In visits to officials of half a dozen airplane factories in various parts of England last summer I found a full half of them driving American cars and a couple of the others riding in French products. A count made outside the houses of Parliament, at about the same time, showed that nearly fifty per cent of the cars belonging to members had been built in the United States. Small wonder, then, that the patriotic and sentimental appeal is added to the purely economic to secure British support for British products. Tariffs alone do not furnish the answer, for tariffs protect only at home and preferential duties can never be set high enough to be conclusive in their effects. The British-goods-for-British-markets policy, on the other hand, reaches out wherever there are men and women of British birth, and it was at intra-empire trade, and especially trade between the home country and the dominions, that Wembley was primarily aimed. The desire to encourage emigration to keep the great open spaces British ranked as a close second.

Photo by the author

TRAVEL DE LUXE IN STOCKHOLM

An example of the "parlor car" planes in service

The automobile industry of the Midlands has suffered from the success of American efforts over-seas, but the building of airplanes goes on apace. England has been very conscious of the size of the French air force, and English factories have received orders to keep them steadily at work as a result. It is all government business, and commercial aviation has suffered by the very lavishness with which the Royal Air Force has placed orders, as most of the larger companies feel little interest in preparing commercial designs, from which at best hardly more than a dozen examples can be built, when they have before them the alternative of turning out deck flying machines or pursuit airplanes by the score. Some of the largest factories definitely refuse to consider any commercial business at all, and that has been one reason for the poverty-stricken condition of the equipment of the British air transport monopoly. The indifference of manufacturers, combined with a very praiseworthy attempt to economize on capital and keep the purchases of new flying equipment to a minimum, had at one time brought the air lines to such a parlous condition that on the occasion of a visit to Croydon field late in the afternoon last summer a manager of the company informed me that he had eight services scheduled for the next day and three machines in sight with which to run them, and resignedly remarked "Three into eight don't go." That situation has now been much improved, and even through the worst of the shortage the London-Paris traffic was handled somehow, with more than a thousand passengers making the Channel crossing by air in one week during August.

II

Moving on from Wembley and the airplane factories of Britain, a somewhat circuitous route led to Cherbourg, the base of operations for the French glider meet of 1925. Much has been learned of gliding in three years, and the French have profited by the lessons of that time to transfer their meets from the very unsatisfactory hill near Clermont-Ferrand which they tried in 1922 to the bay of Vauville, ten miles west of Cherbourg, a site that could not be topographically better for gliding flight if it had been made to order. All records for duration and altitude were shattered there during the ten days of competition, and the district's only flaw is its non-stop precipitation, which left me idling about Cherbourg for three days to see two hours of gliding at the end of that time, — an experience reported to be by no means unusual. Seeing how calmly officials and spectators took a three-hour glide this summer, it was hard to realize that it was but three years ago I had been in camp with many of the same men and that a flight of a minute and a half had been a real sensation and the occasion of a triumphal entry into the dining hall by the pilot responsible for so notable an achievement.

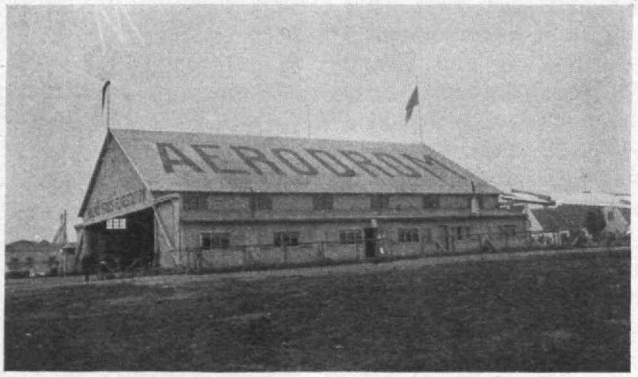


Photo by the author

AIRPORT HEADQUARTERS IN MALMÖ

A hangar of the Aërotransport Company

A journey from Cherbourg to Amsterdam brought more airplane factories and more air lines within reach. The Dutch port is the site of the operations of one of Europe's few international airplane companies, com-

panies depending on foreign trade for a substantial part of their income. For any other sort of business the location would hardly be advantageous, as the Dutch demand for airplanes is of course comparatively small, but the very fact of location in a small country which has no enemies and of which no one is jealous is helpful in seeking foreign trade, and Fokker machines from Amsterdam are operating under German, Russian, Danish, and other flags, as well as under that which flies above the factory.

The Dutch city has the advantage, also, of being one of Europe's great air junctions. Dutch, British, French, Belgian, German, and Swedish airplanes come daily to the flying field of Schiphol, the airport of Amsterdam, and it is linked with a score of cities by regularly scheduled routes. Unfortunately, air transport in Amsterdam labors under one disadvantage, peculiarly Dutch. We in Boston are separated from our airport by the harbor, but the harbor is a permanent obstruction, and there is always the East Boston tunnel as a means of passage. In Holland the bridges across the canals have a disconcerting way of opening for the passage of a long string of canal boats propelled by one-horsepower engines or by the efforts of one man with a pole on each boat at the very time when the traveler on the highway is most in haste. That distressing characteristic displayed itself to the full when a manager of the Fokker Company was rushing me back from Schiphol to the city to catch a train, and three drawbridges in succession ponderously lifted their portals to bar our way at the banks of canals which it seemed that a good broad-jumper might almost have cleared with a leap, — and the train went on its way without me, in the irritatingly impersonal manner of trains.

There is no air line from London to Cherbourg, and it had been easier to take a night train from Paris to Amsterdam than to wait for the next day and fly. From Amsterdam I was really anxious to go forward by air, for the city is the western terminus of one of Europe's most interesting air lines, the *Aëro-transport Aktie Bolaget* of Stockholm, operating multi-engined airplanes of a new type between Amsterdam and Malmö. When I sought to make the trip, however, I found myself balked on two counts, for in the first place the capacity of the airplanes was booked up solidly for two weeks ahead, and even if that obstacle could have been overcome unsuspected difficulties arose in securing a visa permitting entry to Danish territory, whither I wished to go immediately after reaching Malmö. The Scandinavian countries display a caution about admitting strangers across their borders which is quite astonishing in view of their neutrality during the war and of their supposed lack of external enemies and freedom from any Bolshevist or other political menace. Whatever the reason, the fact is indubitable. I had sought a Danish visa in Boston and been told I must go to New York. I had looked in at the Danish consulate in London and found a discouragingly long line ahead of me. I had tried in Cherbourg and been referred to Paris. Now, I sought the magic stamp on my passport in Amsterdam, with every minute of my possible time in Holland allotted to some definite purpose, and was told that I must go to Rotterdam to prosecute my quest. Combined with a shortage of accommodation, that definitely eliminated the possibility of going directly to Copenhagen by air or otherwise, so I made a rapid revision of my rather elastic itinerary and journeyed to Berlin.

III

As it always seems to an outsider that there is nothing which could help the economic status of continental Europe so much as a customs union and an agreement for substantial freedom of trade, it is encouraging to observe a general slackening of vigilance at the boundaries, a slackening which incidentally contributes very materially to the comfort and pleasure of travel. To pass from Germany into Czecho-Slovakia, for example, three years ago, was to be a unit of a seething mob clamoring for the attention of one of a wholly inadequate force of customs officials, who finally seized fiercely upon one's baggage and went through each piece with painstaking care and a host of inquiries about the history of any article of hand baggage out of the ordinary. Cleared on the German side of the boundary, one passed through a gate and repeated the process for the Czech representatives. Three years later the crossing of the same boundary involves only the spreading of one's baggage out on the counter and the indication of its extent by an expansive gesture which the customs representative acknowledges by hastily inditing a quaint cryptogram in colored chalk on each piece. Crossing thirteen international boundaries in seven weeks during the past summer, only on half a dozen occasions was I called on to open a single suitcase, and both moving picture camera and portable typewriter, each of them anathema to customs officials in years gone by, passed without comment except for the British difficulties already related. Such have been the results of the Dawes Plan and of the stabilization of most of the continental currencies, coupled with a gradual reduction of political tension and a slowly increasing inter-racial tolerance. On the night train to Berlin a German functionary stuck his head into the compartment, glanced at the passports of its occupants and went on his way without ever mentioning such things as baggage or customs.

Berlin attained, the still hunt for the Danish visa was renewed. A glance at the line outside the consulate suggested that the whole day might well be allotted to that purpose, but a telephone call from the office of the American commercial attaché, always efficient in the service of the American business or professional man, worked wonders and cleared the path for a prompt departure for Copenhagen, following on a day spent in visiting the Reichstag and in other employments.

Not even in Berlin was a Norwegian visa secured, but that attempt had been given up as hopeless, and Norway had regretfully been crossed off the list of countries to be visited. In an effort to restore the Norwegian crown to parity imports are being held to a minimum, and the foreign commercial traveler is viewed with suspicion. The Norwegian consul to whom I had applied evidently feared that I might undertake to sell something to his countrymen, for he declared it necessary to wait about two weeks for a special authorization from Oslo before putting the stamp of his approval on my passport.

IV

Copenhagen sees little of the American tourist, and the Copenhagen hotel association reports a total of but 4400 American guests in the hostelries of the city during 1924, as against at least fifty times that number in Paris. It is regrettable that it should be so, for while the Danish capital has no outstanding scenic attraction there is a quiet charm both in the city and in the countryside, and the Baltic at Hellerup or Elsinore on a summer afternoon, an azure sea dotted with the white sails of racing yachts and with the Swedish shores just far enough away to relieve the monotony of the horizon, yields nothing in depth of coloring or in beauty to the Mediterranean at Nice or Mentone. An American may feel very much at home in Copenhagen. The book-store displays feature the works of Rex Beach and Zane Grey, and such other vaguely familiar titles as *Forsta Ord-Puzzle Boken*, *Det Grone Hatten*, *Sin Fatter's Datter*, by Gene Stratton Porter, and *Tre Vecken*, by Elinor Glyn! Two-thirds of the automobiles seen in the streets are Fords and two-thirds of the remainder come from other factories in Michigan, Ohio, or Indiana. Copenhagen has one traffic problem, however, alien to American experience during the past generation. Even on the main streets automobiles go by only every now and then, but bicycles pass continuously in platoons and in regiments, presumably owing their popularity to the absence of hills in the neighborhood. The quadrilingual guidebook with which an enterprising hotel keeper furnished me declares that "It is estimated that there are 200,000 bicycles in Copenhagen," but adds with an admirable caution against over-statement "of course they are not all on the streets at the same time." At the time of my visit I should have thought it quite unnecessary to hedge the total with any such restriction.

The relative scarcity of tourist visitors in Copenhagen is reflected in linguistic difficulties. Whereas nearly anyone can be stopped on the street in Amsterdam with the confidence that he will have a grasp of two languages, and is quite likely to be fluent in four, the traveler in Denmark sometimes finds even German of no avail and has to depend on the sign language or let his questions go unanswered, unless he is so fortunate as to have a command of the native tongue.

Denmark has an economic problem which, although not absolutely unique in recent European history, is at least unusual. The complaint is that the crown has recovered too rapidly from its depreciation, never very severe, and that as a result internal prices have been so elevated that it is impossible to sell Danish produce abroad. An American visitor hears with regret frequent charges that this objectionably rapid appreciation has been the result of the machinations of American speculators, but remembering that it is but a few months since the same charges were being made against the same individuals in connection with the movement of the franc in the other direction regret is tempered with the philosophic acceptance of the conclusion that Wall Street is a convenient sinner to blame for any ills that beset a fiscal system. Already during the latter part of last summer the Danish exchange rate had been brought under control and its rate of fluctuation checked by energetic action by the state bank at the instigation of the Government.

Denmark is a country pacific by national tradition and by geographic situation, but the limitation of the Army to an insignificant size has not prevented the offering of government support to commercial aviation. Denmark, in fact, qualifies as the only country in Europe except Soviet Russia in which, as in the United States, an air line is operated under direct government control and with part of the stock owned by the government. The Danish ministry of transport is very intimately concerned in the detail operation of *Det Danske Luftfartselskab*, one of the two air transport companies operating from Kastrup aërodrome, outside of Copenhagen.

There is a pleasing solidity and regularity about Central European air transport which is due in part to the relative shortness of most of the routes flown, although much must be credited also to good equipment and careful maintenance. Acquaintance with military operation, during and just after the war and with the somewhat haphazard pursuits of the "gypsy flyers" and other small-scale American operators is seldom calculated to impress with the ability of an aëronautical enterprise to hold to a fixed schedule, but on some of the commercial air lines such as are run in Europe and such as the Air Mail here that ability begins to be taken as a matter of course. Lunching with the field manager of one of the companies operating from Kastrup, our meal was hastened to a close when he drew his watch from his pocket and remarked that the machine from Berlin was due in five minutes and that he ought to be getting out on the field, and we had just reached the hangar when it came in sight and landed, — two minutes ahead of scheduled time.

From Copenhagen to Malmö across the Kattegat requires only ten minutes by air but a little over an hour by sea, and from Malmö one may entrain for any of the great Scandinavian cities. There is no passenger air transport running north from Malmö, although a night air mail route, the only regular night operation in Europe, connects Stockholm with Berlin.

V

In Stockholm, as in Amsterdam, if there are grave economic problems they are deeply buried. With a currency that has never deviated far from its par value and with good markets at home and abroad, Sweden gives a general impression of stability that makes the visitor feel at home despite language differences. Sweden, like Denmark, seems to be taking little heed of wars and rumors of wars, but, like the Danes, the Swedes feel great interest in the air as an avenue of commerce, commerce for itself and not merely as an incident to the up-building of a military force. Air travel seems to appeal to the individual Scandinavian even more than to the American or Englishman, and from the very beginning of the operations of the Aëro-transport Company between Malmö and Amsterdam full loads have been carried. My inability to secure passage in Amsterdam had been in accordance with the general rule. Unfortunately, the line still depends heavily on subsidy, and the impossibility of securing an increase in the subsidy grant

prevents any present duplication of schedules or enlargement of the scale of operations. The Swedish business man, and the foreign resident as well, now use the airplane quite as a matter of course, serving as it does to cut the time between London and Stockholm from about forty hours to about twenty, and there are many regular travelers who never think of going to London or Paris in any other way.

Of the Venice of the North itself, with its intricate channels along which the steamers pass between high rock walls and under an occasional slender concrete bridge spanning the chasm, it is unnecessary to speak. Like Copenhagen and many another northern city, it has been too much neglected by the tourist.

Malmö, as well as many other Central European cities, has taken a leaf from the books of Leipzig and Nijhni Novgorod and holds an annual trade fair. Again the omnipresent American automobile was prominent among the exhibits, passenger car, truck, tractor, and motor bus all appearing together, but American buyers were more scarce, and indeed my arrival as a visitor enabled the management to add one to the list of nationalities represented, as no other American "business man" had registered up to that time.

One of the most interesting of Malmö's industries did not appear at the fair. The restrictions imposed on German aviation under the Treaty of Versailles have led the more important manufacturers to establish branches outside German boundaries where they can do as they please without alien supervision or hindrance, and the largest of them all has granted to a Swedish company a license to build from his designs in a suburb of Malmö. The French press has had a way of referring to this factory simply as a branch of the German one and as an expedient for escaping from surveillance and building war material for ultimate German use, and the officials of the company were anxious to repel such suspicions by entertaining foreign visitors and enabling them to see for themselves that the personnel was all Swedish and the work purely commercial.

These German and Scandinavian airplane factories go ahead on non-military machines at a rate undreamed of elsewhere. The Malmö plant was constantly adding to its staff and an ultimate enlargement to some 2000 workers, with a production of over 100 three-engined ten-passenger machines in 1926, was being planned.

VI

From Malmö to Berlin is an all-day journey by way of Trelleborg and Sassnitz, with through cars transferred across a wide arm of the Baltic Sea on ferries. There was no time to stop over on the North Prussian coast, but no stop was needed to bring conviction that the news of the German revolution had as yet failed to reach many of the residents of the neighborhood, for the imperial black, white, and red floated from numerous flagstaffs along the shore. Berlin is more definitely committed to the black, red, and gold of the Republic, although even in Berlin wreaths tied with the old colors are periodically renewed at the foot of the Bismarck statue. However the parts of Germany may vary in their political views, they all show the same astonishing rebound from the despondency common a few years ago, when depreciation was swelling a few fortunes at the expense of the complete wiping out of the accumulated capital of the small holder of securities and of the imposition of a gravely lowered standard of living on most classes in the community. I had seen Germany in 1920, when attempts to rebuild German trade overseas were just getting under way and when business men were expressing a confidence for the future not, up to that time, backed by actual accomplishment. I had visited the country again late in the summer of 1922, when the mark was just starting its hectic slide. No one could tell the worth of his money from one hour to the next, and shopkeepers were beginning to put up their shutters because they preferred to keep on their shelves goods that had some value rather than to exchange them for currency that had none. Reparations difficulties were approaching a climax. The French entry into the Ruhr was but a few months away, and the early signs of that process sometimes known as *Stinnesization* were manifest. Walther Rathenau, his country's ablest guide, had been basely murdered.

The passage of three years found German currency, thanks to the Dawes plan and to the coöperation between the Reichbank and the transfer agent and his assistants, as stable in gold exchange value as that of the United States. The house of Stinnes, having flamed its hour on the financial sky, was giving way to dissolution and decay. The furious speculation that marked the period of currency collapse had quieted, but the gyrations of the stock market in the period of inflation had often been quite divorced from the real soundness and prosperity of the companies represented, and all the little indications which the traveler may observe and which serve him in amplifying the interpreting statistical tabulations of financial conditions pointed towards a real prosperity greater and more broadly shared than at any other time since the armistice.

Nothing shows that prosperity better than the activities of the trade and industrial fairs, and the outstanding example of this summer was the trade and transport exhibition at Munich, a record in many exhibits of equipment and models and in some 5000 maps and graphic charts posted around the walls of the buildings of Germany's advance and present position on the land, at sea, and in the air. The promoters of Wembley and those responsible for the technical detail of some of the exhibits there, especially those in engineering, could have learned much from a study of the organization of the *Deutsche Verkehrsausstellung*. Perhaps the most surprising sight of all to an American without reason to keep especially conversant with shipping activities was the graphical record of operations displayed by the two groups which dominate the German merchant marine. Stripped at the close of the war of nearly everything that would float, they already show a tonnage about half that which had been built up in forty years before the war and handle a freight traffic one-third as large as that of 1913. The North Atlantic passenger traffic has grown more slowly, for there has been no new construction to compete with the *Majestic* and *Leviathan* and passengers are more swayed by sentiment than are shippers of freight, but even that is growing steadily and is now about ten per cent of pre-war figures.

The earnestness and attention to detail with which the exhibitors at the transport exhibition had made their plans were illustrated in a feature of the display of one of the great engineering firms which would have delighted the heart of any American boy. A space about sixty feet by thirty on the floor of one of the halls was devoted to a model railway system, with about a quarter of mile of track, some fifty or sixty switches, a dozen locomotives, and perhaps 100 freight and passenger cars, with the whole thing, including the car couplings, operable from the side-lines. Two or three earnest young Germans, each with a row of control levers in front of him, threw switches and flashed signals, started locomotives and stopped them again, picked up strings of freight cars to shunt them from one track onto another and then dropped them as a whole or in part, for the benefit of admiring audiences. The city being Munich, a considerable proportion of the model freight cars were appropriately stenciled with the names of breweries.

An even greater attraction than the model railroad was the airplane display, and there were times when as many as 100 Bavarians were waiting in line to examine a single one of the twenty-three machines shown. German enthusiasm for flying seems to know no bounds.

VII

The airplane industry in Germany, unlike that in France and England, gets no military orders, as the German air force was completely disbanded under the terms of the Treaty. There is, however, a large amount of construction for commercial air lines, of which the German Republic now has more than all the rest of Europe put together. In Germany, as in other European countries, the central government offers a subsidy, but Germany differs from the others in the extent of the interest taken by local governmental units. Cities have provided landing fields, have made important contributions to the stock of the operating companies, and have given direct subsidies to induce the establishment of lines touching at their new airports. The municipality of Berlin, of course, never needed to offer any special attraction to get lines started, but it has taken action well calculated to increase the popularity of air travel in replacing the rather unsatisfactory suburban fields at Johannisthal and Staaken, in use three years ago, by an airport at Tempelhofer, only ten minutes run by taxi from the center of the city and with a landing and take-off surface about a mile by three-quarters. Few large American cities have so large a field available and few have a flying station of any kind so conveniently located. None now equal Berlin in the combination of those qualities.

The absence of military flying in Germany is reflected in the comparative ease with which information on operations can be secured and in the absence of direct Government control over those operations. Flying is a straight business enterprise, and inquiries about the conduct of that business go directly to the officials of the companies, — a situation quite different from that in some other European countries, where any request for information about airports and the operations there has to be referred first to a Government department because of the close liaison between the commercial and military uses and of the employment of some of the flying fields by commercial companies and military units in common.

From Berlin to Prague, again, there is no means of air travel, as Czecho-Slovakia and France act in very close coöperation, and it has been impossible for either one to make arrangement for direct aërial connection with Germany as long as the Versailles rules governing German aviation stand. A country allied with France, and especially a country as highly industrialized as Czecho-Slovakia, would be expected to take kindly to the airplane, and both the manufacture of flying equipment and its operation have been prosecuted with vigor in the state that includes old Bohemia. The degree of energy displayed in the manufacture of airplanes is equaled by that shown in the reception and entertainment of visitors. Having been the recipient of an invitation to address the Aëro Club of Czecho-Slovakia, I was the subject of the solicitous attention of some of its members, who picked me up at 7:30 the first morning and stayed with me until 9:00 that night, with visits to three airplane factories, two flying fields, and the officials of two government departments. The next morning we started out at seven and drove sixty miles to the famous Skoda works, whence came the 42-centimeter howitzers during the war, but which are now engaged on more peaceful products in a wide variety, ranging from bridges and steel castings for shipyards through locomotives to airplane engines and automatic machinery for cigarette manufacture. The works are almost entirely under the direction of Czech personnel, the German element having disappeared except from the ordnance design department, and the control of a majority interest in the stock has recently passed into the hands of the Schneider firm of *Le Creusot*, furnishing an additional bond between Czecho-Slovakia and her western ally. From the inspection of a long series of Skoda shops, foundries, and laboratories the trail led back to Prague, with arrival barely in time for a lecture translated into Czech, paragraph by paragraph, by two aëronautical engineers who volunteered for the job and who worked in conference, and received by the audience with that polite attention and slightly restrained manner with which the typical American gathering greets a lecture given in French. The second day's activities finally ended late in the evening, and as I took my leave one of my indefatigable hosts remarked, "You Americans are such hustlers you must find us very slow in Central Europe."

The busy condition of the Skoda works and the company's energetic endeavors to secure foreign trade are typical. Czecho-Slovakia has been more than fortunate in the men that have controlled the country's political destinies and fiscal policy during the past few years, and business has profited by the wisdom with which the reins have been held. The Treaties of Locarno should still further strengthen the position, and in the particular field of air transport they ought to go far to win for Prague that place as a major air junction for which it seemed destined before the Franco-German aërial difficulties began in 1923. When that time comes the Czechs may find it difficult to compete with the German factories, but at present they are producing all

the airplanes for their own air force and for such few commercial lines as they now run, and they have been especially successful with airplane engines. At the time of my visit the Skoda Company was just testing a special racing engine which has probably been excelled in performance only by two or three types from other countries, and one of the best small radial engines that has ever been produced for sporting airplanes is also the product of a Prague factory.

VIII

The route from Prague to Switzerland led across southern Germany. It had been designed as a through trip, but a washout delayed the train so that connections were missed and a considerable part of the distance had to be covered in a series of accommodation (very) trains which wandered across country at twelve miles an hour, stopping from five to fifteen minutes at every station and carrying fourth-class passengers, live stock, and freight indiscriminately. The goal was the Zeppelin factory, set on the shore of that beautiful blue body of water which one calls the Bodensee when looking southward across it to the Alps — or Lake Constance when seen from the other side. The Zeppelin works have been very quiet since the *Los Angeles* left Friedrichshafen for America, but the officials are hoping to secure a waiver of the Allied restrictions so that the construction of another ship for scientific investigation may be undertaken. The celebration of the twenty-fifth anniversary of the Zeppelin Company was occasioning a temporary flurry of excitement in the town at the time of my visit, and there was no room to doubt the genuineness of German enthusiasm for the large rigid airship.

From Germany into Switzerland is but an hour and a half by water. The trip was enlivened by a singular lack of liaison between the captain of the steamer and the chief engineer, who suddenly began answering the indications of the engine-room telegraph with a time lag of about thirty seconds, with the result that in coming up to a dock inside a curving breakwater the steamer was first run at nearly full speed ahead into the concrete pier, then backed into the breakwater, and then run into the pier again, to the accompaniment of a great splintering of planking and railing and loud cheers from the bystanders.

The Alps have now to share with the League of Nations the honor of being Switzerland's greatest attraction, and like many another American I made for Geneva and the *Palais des Nations*. It is a curious fact, from which the reader may draw his own inferences, that one of the very few nations which is not a member of the League furnishes about ninety per cent of the tourist visitors to the League's headquarters, and it has been necessary to create a special organization for shepherding battalions of Americans through the building in which the Secretariat is housed and the Council meets. America is represented in the unending stream of visitors, sometimes over 100 in a single day, that file through the halls, and represented also in the tablet to the memory of Woodrow Wilson that is placed on the wall around the grounds.

IX

From Geneva to Paris, again, there is no air line, since most Swiss air transport is under German control and the machines are not allowed to cross into French territory and the French have not elected to strike out in this particular direction for themselves. My whole trip, indeed, had been unfortunately planned for flying, had it been my primary object to duplicate my air mileage of three years before.

The degree of congestion in the available dwelling places of Paris ranked well up with that in Washington during the war, which approximated to the superlative degree. Had I no previous evidence of the number of Americans who chose this summer to tour the old world, their presence would have been clear when hotel after hotel announced itself as booked up not only for the next night but for the next month. Paris, like London and Munich, had a special attraction in the form of an exhibition to add to its ordinary inducements to the visitor.

The Paris exposition contained little that was directed especially to the attention of the engineer, but some of the exhibits might have been the better for having received such attention in advance, especially a roller coaster which periodically suffered accidents of more or less gravity. Devoted to modern and decorative arts, some of the displays were so dazzlingly modern or even futuristic as fairly to take one's breath away. Curiously enough, the pavilion occupied by Soviet Russia was among the more conservative and somber in tone, while some of the articles proceeding from countries of less radical political organizations had the appearance of having been designed by the membership of a jazz band. A generally pleasurable aesthetic impression was, of course, to be taken for granted in France.

There has been relatively little expansion of French air lines in the last three years, but the airplane industry is more flourishing than ever. The Riffian troubles have created a steady demand for flying equipment new in construction but not necessarily in design, and the output of day bombing machines of a type first sent to the front in 1916 or 1917 still continues. French factories are drawing trade, also, from their Allies in the East. Czecho-Slovakia builds her own airplanes, and the only French connection there is through the Schneider ownership of the Skoda factory and through licenses for certain Czech firms to manufacture engines and airplanes from French designs. Poland, Jugo-Slavia, and Rumania have not gone ahead so rapidly, and all of them are buying liberally from French firms, Poland having placed a single order recently for 200 new machines of one type. The Japanese Army, too, has given a number of orders. If the forthcoming conferences in Geneva lead to anything effective in the way of limitation of aërial armaments the French industry will be a very acute sufferer.

The return to America was even less eventful than the departure until the last hour, when a schooner and little tramp steamer cut across the liner's bows as she came up the channel from Staten Island, forcing a sudden signal for full speed astern, which swung the stern around and put the ship aground on a falling tide. I was talking to a

ship news reporter in the lounge when the sudden tremor of the hull announced that something had happened, and no fireman ever responded to an alarm more promptly than he to reportorial instinct. Grabbing his hat in one hand and his camera in the other, he took his first stride towards the door, and when I reached the forward end of the deck some thirty seconds behind him, he was already precariously perched on a hoisting boom projecting far out towards the bow and taking pictures. The alarm proved a false one, however, for the contact was light and the bottom soft and a few minutes put the ship in deep water again, and an hour later the returning travelers were on the pier receiving demonstration that there was at least one country in the world where the art of thorough customs examination had not been forgotten.

With the Undergraduates

(Limitations of space prevent the inclusion, this month, of the regular section on Undergraduate Affairs)

Rumpus

THE lurid flames of recrimination flared suddenly in the quiet sky of Technology on January 11 when *The Tech*, undergraduate triweekly, and *Voo Doo*, monthly comic magazine, fell suddenly and with great violence afoul of one another. "Tech Student Publications In Bitter War," said the front page of the *Boston Traveler*. "Tech Paper Puts One Over on College Rival," said the *Post*. "Tech Steals a March on Voo Doo Editors," said the *Globe*. "Comic Paper Opens Fire on The Tech," said the *Traveler* again.

For most of the current school year the influence of H. L. Mencken and Oswald Garrison Villard has rather permeated the news and editorial columns of the newspaper. A flashing editorial rapier and a bludgeoning news shelalah have decapitated many high and ghostly things. There was a thrust at the tutoring evil at the Institute. A mercenary spirit had a complete strangle hold on the fraternities, said another pronouncement. "Beneath the ambition and energy of activity go-getters runs a common bilge of egoism," said a still more bitter note. "They pound into the skulls of ambitious freshmen that activity men are the only complete men."

Turning suddenly from matters domestic to those of the greater *welt-politik*, the newspaper blasted the Student World Court Movement with a long polemic containing charges that the organizations pushing the Court discussions were spreading propaganda designed to result in entangling alliances.

It was not surprising that during all this, perhaps, several activities should fume a trifle. This World Court business was all very well, but what about the announcement that next Friday is the last day to get Senior portfolio pictures into *Technique?*

And so the *Voo Doo* planned a reprisal. In secrecy the Board worked over an issue to contain a miniature reproduction of *The Tech* which would feature the myriads of its failures, neglects and obliquities, as others of the campus saw them. A stout editorial denouncement was written presenting for the consideration of *The Tech* editors an agenda of six points wherein the paper should immediately be altered.

The secrecy of the comic editors in preparing their issue was profound, but not quite sufficiently profound. Somehow the news leaked. The Editors of *The Tech* learned of the forthcoming blast. By many devices they sought to unearth the material previous to its publication. Finally, some thirty-six hours before the *Voo Doo* publication, the editors of *The Tech* by some means obtained proofs of the *Voo Doo's* issue. Next morning, naturally, *The Tech* was decorated with a scream-head which asserted "Voo Doo Attempts To Knife The Tech." By process of photo-engraving, it reproduced in advance the *Voo Doo's* entire burlesque number, reprinted their editorial and acidly answered it with one of their own. When, therefore, the *Voo Doo* appeared next morning it was not new to the undergraduate gaze, save that it contained a pasted insert referring to the "criminal action" of *The Tech* in obtaining an advance copy. The editors of *Voo Doo* showed at first a marked tendency to hysterics — a tendency heavily checked, however, when they discovered that the resulting publicity had sold their issue out in some three hours.

In its next issue *The Tech* printed testimonials to the effect that it was all that it should be. *Voo Doo* then retaliated with a four-page flier asserting that *The Tech* was all that it should not be. Neither side proved its case, and the flare died down as most things do to a dull red glow at the edge of the horizon. It is said that there are still a few hurt feelings.

Tech Show Barnstorms

One of the largest trips in the history of Tech Show has been arranged for this year's production. All the contemplated cities have been signed up and arrangements for the production completed. The Show, "Too Many Brothers," will stop first at Hartford on February 1, go to Pittsburgh the next day, thence to Buffalo and thence to Schenectady, returning to Boston after having spent four days on the road. Approximately sixty men will be carried.

The trip this year will cover approximately 1400 miles, being easily twice in mileage what the old New York, Hartford, Northampton trip was. This trip has been made possible by the backing of the alumni clubs and their guarantee of the various cities. The Alumni in charge of the Show's trip to the various cities are George W. Baker, '92, Hartford, F. H. Burke, '05, Buffalo, E. D. Harrington, '18, Schenectady, and G. W. Ousler, '16, Pittsburgh. The failure of Rochester to support the Show despite the efforts of T. M. Taylor, '22, very nearly caused the trip to be given up.

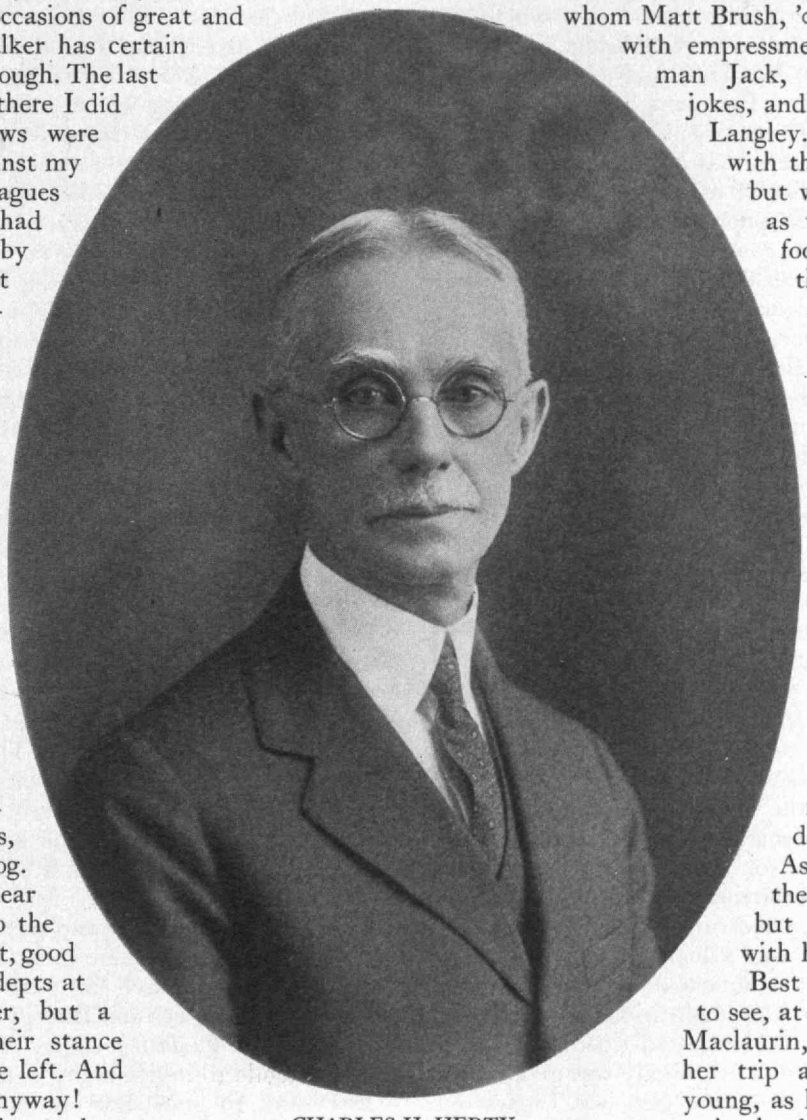
Highlights of the Annual Dinner

The festivities at the Chamber of Commerce on January 9 sketched in polyphonic prose by The Review's Contributing Editor

By ROBERT E. ROGERS
Associate Professor of English

IT was a good idea having the Alumni Dinner at the Chamber of Commerce; at least it seemed a good idea to those of us who in the line of duty eat much at Walker Memorial. This is not saying a word against Walker, its food, its service, or even its mural decoration. But for occasions of great and orgulous festivity Walker has certain lacks. It is not large enough. The last Alumni Dinner I ate there I did not enjoy. My elbows were wedged so closely against my side by esteemed colleagues of the Faculty that I had to let my chicken go by default and content myself with spoon vittles which could be managed with one hand.

Then, too, Walker is a little weak on the *mise en scène* of a ceremonial dinner, the shrimp picks and the olive spoons, the fish slices, the bulbous goblets of crystal, the individual soup silencers, the plates of Sèvres, Royal Worcester, Staffordshire, the lustre ware, the damask and silken naperies, in short, the whole dog. And the waiters are dear good boys, a credit to the Institute for their effort, good at the Calculus and adepts at throwing the hammer, but a little uncertain in their stance when serving from the left. And we all know Walker anyway!



CHARLES H. HERTY
One of the two principal speakers at the Annual Dinner of the Alumni Association on January 9

So it was a refreshing and to most of us novel scene that met our eyes on the evening of Saturday, January 9, when some four hundred and eighty-one of us were allowed, approximately at seven, to file into the new great dining hall on the top floor of the new great Chamber of Commerce building at 80 Federal Street. We had had our rubbers (for it was snowing) put safely away by deft fingered Phyllises into immaculate rubber bags, so we didn't have to worry about *them*. And a great organ was playing, thundering out a gorgeous march almost as effectively as if we had had on the old ear-phones. And there was a good large crowd, not considering the blizzard at all. And we were going to see the Zizz film. So everybody was happy—and hungry—and full of expectation. It was to be a great evening.

There were four of us at the Faculty table, the genial Robert Smith of the Machine Tool Laboratory, whom Matt Brush, '01, visited and greeted with empressment, the canny Scotsman Jack, who loves American jokes, and the latin and literate Langley. The rest of them were with their respective classes, but we did not miss them, as we had all the extra food trimmings from their places. Horace Ford was with us briefly, seizing the chance, as he expressed it, to be counted once a year with the Faculty, but soon deserted us for the brighter charms of the adjoining ladies' table, where with George Gilmore, '90, he played the gallant for the evening. At the ladies' table also we glimpsed briefly Gretchen Palmer, newly elected President of the Women's Association, representing the younger of the Co-eds, but she soon left to sit with her own Class of 1918. Best of all, however, was to see, at the ladies' table, Mrs. Maclaurin, home once more from her trip around the world, as young, as lovely and as gracious as in the dear days of old.

They gave us a list of the head table guests, "reading from left to right" as in *Vogue*, so that no one could possibly miss them. They made a very presentable appearance, and it is safe to say that the old historic smoke-blackened rafters of the hall have never looked on a more handsome assemblage of stalwart, intellectual and well-to-do gentlemen. All of them wore boiled shirts and many added the doggy black ribbons so much in vogue in Hollywood.

The President of the Alumni Association presided, Charles Hayden, '90, flanked by President Stratton on the left and the guest of honor, Dwight Morrow, of

Amherst, Wall Street, and Washington, on his right. There were also Treasurer Everett Morss, '85, and his colleagues of the Corporation, Howard Elliott, Edwin S. Webster, '88, Charles T. Main, '76, and George Wigglesworth. Charles M. Spofford, '93, the Chairman, and H. P. Talbot, '85, the Dean, represented the Faculty, and D. A. Shepherd, '26, the Senior Class and the student body. Wallace C. Brackett, '95, chairman of the dinner committee, sat next to the vocal and inevitable Denison, who led the cheers and songs. There were two Vice Presidents of the Alumni Association, William R. Kales, '92, of Detroit, and our own Samuel Prescott, '94, who presides at Cambridge in the absences of Mr. Hayden. Mr. Hart had as neighbor William Z. Ripley, '90, and President Stratton talked to the other speaker of the evening, Charles H. Herty, the chemist. That is all, except that Matt Brush, '01, whose name wasn't on the list at all, somehow crashed the gate and kept young Shepherd amused throughout the evening. An impressive company. Somebody ought to have nicked them for an Auditorium while they were in full sight of the audience and helpless.

It was a good dinner, very pleasant in its appointments, well and rapidly served by nice girls in pale yellow linen — or dimity — or maybe challis — and accompanied by an excellent program by Mr. Louis Weir on the Wurlitzer organ, with occasional songs by Miss Marion A. Newman, a very pretty little girl in green and gold, with a really nice voice. And what with Frank A. Bourne, '95, of the dinner committee, wandering happily about and presenting all the ladies with bouquets from the table decorations, and the official raucous cheering about the state of beatitude of the cheerers and the eschatology of the Institute . . . nobly started at 7:17 precisely by the six members of the Class of 1924 present, and followed by the Class of 1917, fresh from the Engineers Club, and brought to a noble finish by the Class of 1922, led by Mr. Eric F. Hodgins, member of the Executive Committee of the Alumni Association, General Secretary of the Class of 1922 and Managing Editor of The Technology Review, clad with rare appropriateness for the occasion in a blue princeofwales shirt and soft collar . . . what with this excitement, there was a merry hum of conversation and happy laughter, almost drowning those other sounds appropriate to the deglutition of rare viands and vintage iced water. This lasted till 8:25, when an armistice was declared and everybody was given fifteen minutes to fraternize across the trenches. Cigars were lighted. By the way, as a notable piece of statistics, six of the rich and great at the head table *in a row* refused the house cigars and either smoked cigarettes or produced their own Corona Coronas. And the moral of *that*, my dear, as the Duchess said to Alice . . .

After which, at 8:40 sharp, the serious business of the evening began. The correspondent of The Review knows it was serious, because Mr. Lobdell of The Review and Mr. Hodgins of The Review and Mr. Rowlands of The Review had omitted to inform him that none of the speakers of the evening (drat 'em!) had a manuscript. Consequently they sat at their ease during the barrage of oratory that followed and watched him sweat, with a pencil and a menu card, over the hasty and incomplete notes that follow. Which is not bad for an alibi. Even The Review's Young Man can't beat The Review's Notquitesoyoungman at that.

Mr. Hayden as toastmaster spoke briefly and easily on a variety of relevant subjects; his reasons for entering the Institute forty years ago, with a tribute to the esteemed Dr. Charles H. Levermore, recent winner of the Bok Peace Prize, who was the responsible party; the growth of business to larger units, the end of the day of the small business and the legitimate ambition to be satisfied by being employed by large corporations: the need of the Institute for Dormitories, to raise a million and build ten units; the interesting proposal of Mr. Desmond to create a Technology center in New York. The concrete thing which emerged from this was the suggestion which set the audience applauding, that the Class of 1890 might give one of the units.

Dr. Stratton, first speaker, warmly and affectionately applauded, gave a very succinct, straightforward and informative sketch of progress at the Institute, a preview, as it were, of his coming Report. He pointed out particularly the new developments; the advance in Geodetics in Course I, in automotive engineering in Course II; in non-ferrous metallurgy in III; the progress in town and industrial design in Architecture, with especial reference to the brilliant personnel of the prize-winning student body in that course; the new course in ship operation in XII; in electrical communications in VI; as well as the developments in gas and fuel engineering, building construction, and other practical courses of the sort.

The President professed himself particularly interested in the growth of coöperation between the Institute and its influential and expert friends, especially in relation to the new committees of Alumni and experts who are making careful reports on specific courses, and whose reports are being published in The Review. The Alumni are also to be of considerable usefulness in helping Technology to select properly her raw material, to winnow the students at the source and to encourage more younger men to think of the Institute for their advanced training.

But if applied science and technology were to flourish, said the President, there must be greater emphasis on fundamental research in pure science, especially in Chemistry, Physics and Biology, all of which play such great part in modern industry. The Institute is inviting and intends to invite many European scientists of the first rank to give short courses before the qualified students. Professor Max Born of Göttingen, now lecturing at the Institute on the structure of the atom, is one example of this interest.

In conclusion, Dr. Stratton spoke of finances, saying that he hoped that hereafter they might be excluded from Commencement and spoken of only on this annual occasion *en famille*. He spoke of the large increase in the net value of the recent Eastman gift, of the highly encouraging prospects of the eventual figures of the Frick and Eaton bequests, totalling together two and a half millions. The title to the whole thirty acres across Massachusetts Avenue is finally complete, the former dividing strip now having been added to the other parcels. The downward trend of the proportion of tuition

income to academic expenses, which has fallen from 90% in 1915 to about 70% today made it necessary to find some means whereby that discrepancy might be rectified. The increase in the numbers of the graduate students was encouraging, although it did not mean, and must not mean, that the Institute was to become a graduate school. Finally he congratulated the Alumni on the services of an unusually able and active corporation, expert and interested in Technology, but warned the Boston Alumni that it was their job to interest Boston business and businessmen in the school and help make them familiar with what was being done over here.

The next speaker, a tall, slender, white moustached gentleman, with a clear but Southern voice and a disarming smile and manner, who told several good stories with shy relish, was Dr. Charles H. Herty, President of the Synthetic Organic Chemical Manufacturers Association, and recent President of the American Chemical Society, who spoke at some length on the chemical situation in the United States.

He congratulated Technology heartily on her record during the war and was of the opinion, he said, that Congress certainly should have awarded Technology the Congressional Medal for her outstanding services, especially in chemistry. He reminded us that seventy per cent of all the graduate students in chemistry are now at the Institute, which is particularly noteworthy in view of the fact that the United States, enormously handicapped by indifference and ignorance concerning chemistry when the war broke out, has waked up and is entering on a period of research of the most far-reaching and fundamental character, of which young John D. Rockefeller's recent endowment to petroleum research is only one significant example. And Dr. Herty did not fail to remind the Alumni present of the marvelous opportunities waiting for those who might be interested in the industrial and scientific developments of what he referred to affectionately as the Southland.

Following which Dr. Herty began to become technical. He regretted that he could not go into detail about the work the Packing Institute of Chicago was doing to substitute chemicals for meat victuals, a regret which the Alumni, still in processes of digestion, emphatically did not share. He piously expressed the hope that one of these days even the steel industry would see the light and spend something for research. He celebrated the announcement that today the United States was absolutely independent of the rest of the world in the production of dye stuffs. Then he turned to rubber. This reporter, whose education was classical, early stopped following him; at the point, to be precise, where the good Doctor began remarking upon butadiene and isoprene and the miracle of polymerization. He was afterward informed that isoprene is the thing that makes rubber smell when burned and that you can start with the smell and from it produce the rubber. So much for that! Anyway, one gathered that presently we should all be making synthetic rubber from petroleum and the British Empire would go out of business. On that subject, the great coming revolution in synthetic organic chemistry, our guest waxed eloquent, and with a soft organ obbligato of "Things Are Seldom What They Seem" from "Pinafore," prophesied that the future of the country depended on Research (page Arthur D. Little!) not only in industry but in public opinion and government efficiency, that nothing but research will serve to stabilize the country, to free it from loose emotion and hearsay opinion and put it on the necessary basis of scientific thinking. "More power to you, gentlemen of the Massachusetts Institute of Technology."

As Dr. Herty sat down Mr. Hayden rose, to remark oracularly that the busier a man was the more time he had, and to describe the means by which he had lured and entrapped for this dinner the next speaker, a great banker, a director of the General Electric Company, the head of the notable investigation in American aircraft.

Mr. Dwight Morrow divided his remarks neatly and unmistakably into facetious self-depreciation, information, and exhortation. Those of the audience who were waiting, breathless and on tiptoe, to receive either some straight tips on the market or the inside dope on the administration at Washington, were, to put it mildly, fooled.

Mr. Morrow remarked that he came to learn, not to teach, that he was to fill the function of the supper act that empties the vaudeville theatre, that he was out of place among scientific men, and that however much Mr. Hayden may have pretended to understand the references to non-ferrous metallurgy and butadiene and isoprene, he frankly did not, and didn't care who knew it.

One thing he would say in connection with the aircraft investigation was that the board of which he was chairman in Washington early discovered that the best course in aërodynamics in the country was given by Technology and that their most helpful assistance came from Professor Edward P. Warner [S.M., '17], of that course, who was kindly lent by Dr. Stratton for the purposes of the investigation.

In spite of the fact that the greatest public interest is in military aviation, the future of flying, so Mr. Morrow thought, must be in peacetime development. And in spite of our backwardness we have made one outstanding contribution, the Night Mail, which flies over a lighted airway from New York to Wyoming, and which outdoes Rudyard Kipling's vision in his famous short story of a score of years ago.

Whereupon Mr. Morrow switched neatly into exhortation, a sermon to the Alumni Association, by one who is himself a loyal and influential alumnus of Amherst, cradle of presidents, reminding them, even if they were supposed to be more intelligent and less emotional than such bodies usually are, of their obligation to loyalty. The Founders, he said, are always fanatics who sacrifice all for their dreams; their successors are inclined to take everything as a matter of course. Yet the spirit and energy of the fathers must be kept alive, or the institution will cease to advance. The institution must depend on its Alumni. Dr. Stratton is still head of the most important kind of a Bureau of Standards, the standards of men, of men trained in science, and the standards of thinking. The graduates must always think of their Alma Mater as a place to which they can come back for strength and inspiration.

The speaking thus concluded, about on schedule, at ten o'clock, and immediately the hall was darkened and there was thrown on the silver screen the Zizziter film of the Reunion last June made by H. C. Whorf, '95, in coöperation with the Harbor Outing Committee.

The film, as everyone knows by now, was planned to give distant Alumni a picture of the harbor outing of the Reunion, to mingle a burlesque mystery story with actual events of the outing, to show members of the Faculty of Technology, and generally provide an evening's amusement. There is no particular use in criticizing it as a work of art, particularly as we are told that a whole day's work of preliminary shots, parts of the story of Xerxes Y. Zizziter and his invention for destroying the atom, were destroyed in development.

What remains of the story is mildly amusing, pretty clearly photographed, often cleverly titled, and well acted by a professional actor and his amateur assistants of Technology, particularly Walter Hamburger, '21, as the Russian Vamp. We have spoken before of the opportunity that was missed in staging a connected and interesting scene before the Alumni at the place where the machine was set up. The scattered and insufficient quality of those bits on the screen is another proof of this lack. Technically, and for the money spent on it, it does not seem to us a particularly effective job.

But one does get a good deal of amusement out of watching the crowd, the unforced natural behavior of the Alumni participating, and, particularly, the extraordinary latent dramatic talent of those members of the Faculty playing the part of the visiting committee. Some of them undoubtedly have missed a career in Hollywood. The procession of the group (seen back-to) marching up the Great Court, every back a picture of dramatic purpose; the same group massed on the steps before the colonnade, expressing intellectual disputation by talking on their fingers; Professor Gill registering intellectual interest as he peers into the bowels of the machine, Dean Talbot in his panama as the visiting fireman, Professor Franklin, aloof and unbending, pondering the mysteries of physics, and, above all, Professor Spofford who in the last closeup, with surprise, delight and inspiration chasing themselves rapidly across his mobile countenance, did a piece of acting that Adolphe Menjou need not have been ashamed of. Somebody ought to do a moving picture about Technology some day. It ought to be, vulgarly speaking, a wow.

The singing of The Stein Song, as usual, concluded the evening.

Photo by George H. Davis, Jr.

"IT WAS JUST SUCH A NIGHT AS THIS"

This is January 9, in the Great Court. The first major snowstorm of the winter came on the day of the Dinner, without, however, materially decreasing spirits or attendance

The ARCHITECTURAL BULLETIN

PUBLISHED FOR THE SOCIETY OF TECHNOLOGY ARCHITECTS

HARRY J. CARLSON, '92
President

EDGAR I. WILLIAMS, '08
Vice-President

KENNETH REID, '18
Secretary-Treasurer

Address all communications to the Secretary-Treasurer at Room 3-210, M. I. T., Cambridge, Mass.

BRONZE FLAGSTAFF BASE

For a war memorial in a small city. A study in transition from a square stone base to a round staff. By A. B. Foale, '29

The Course in Modeling

MODELING in clay or plastelline is not generally thought of as one of the subjects taught in the Department of Architecture, but a brief outline of the course at present given may serve to indicate to Alumni that, although the aim of the Department is not to graduate practised sculptors, there is a distinct value to be gained for architectural students by the acquiring of a certain deftness in the plastic arts.

In 1914, when T. H. Bartlett, who had given the instruction in modeling for many years, retired from the instructing staff, the Department decided to discontinue the course. It was felt that the comparatively small amount of time which could be devoted to the subject was entirely inadequate for giving the student any facility in the technique of a sculptor and it was not the intention of the course to train the students to become proficient as modelers.

In 1923 a general revision of the curriculum offered an opportunity again to introduce a course in modeling, this time on wholly different lines. The value of modeling was recognized as an excellent exercise in developing in the student that sense of the third dimension which is so important to the architect and in counteracting the influence which comes from his necessity for working almost entirely in two dimensions as the architect is so often obliged to do. To overcome what seemed to be a fault in the earlier course and at the same time to retain the benefits of modeling for a student of architecture, the idea was conceived of treating the work as essentially a series of problems in architectural composition, the solutions being worked out in modeling wax instead of on paper. Thus a two-fold benefit was obtained: the student studied design in a medium which by its nature would develop his appreciation of light and shade and at the same time was given an opportunity to exercise his imagination and decorative sense. The problems as at present given

LIMESTONE PILASTER CAPITAL

For the entrance vestibule of a museum of natural history. Designed to be lighted from overhead. By B. S. Gruzen, '26

A DECORATIVE KEYSTONE

For the arched entrance to a large office building. The problem here was to compose the keystone with a belt course marking the line of the second floor. By W. T. Peters, Jr. Sp. '27

A SMALL WALL FOUNTAIN

Designed as a point of interest for a stucco wall in a combination sun-room and conservatory, the fountain to be carried out in marble, bronze or terra cotta. By S. Glaser, '25

DECORATION OF A LUNETTE

This design, by D. S. Nelson, '26, is intended to be executed in monochrome terra cotta. For the entrance of a studio building on a musician's estate

are naturally limited primarily to architectural details of decorative character, although in some cases studies for a building have been attempted. Thus far the subjects have included keystones, the decoration of a lunette, pilaster capitals, cartouches, wall fountains, flagstaff bases, and so on.

The problems are presented in the usual design program form. A preliminary sketch in pencil is required at a small scale but with due respect to light and shade modeling in the drawing, and includes any necessary sections. This sketch is criticized from the point of view of composition before the student begins his model which is made at a larger scale. About five weeks are allowed on each problem with a three-hour exercise each week. At the completion of the problem the models are judged by a jury made up of the instructor in modeling and members of the design instructing staff. The models are awarded marks and a criticism is given to the class as a whole on the results of the judgment.

To carry on the course as outlined above it was of vital importance to find an instructor in modeling who had a background of architectural sympathy. The Department was fortunate in obtaining the services of J. Selma Larsen, who for many years has been associated with Olmstead Brothers in handling the architectural accessories of their landscape work. Several illustrations presented in this section indicate the quality of the work which has been accomplished under his direction.

Department News

Application for enrollment in the competition for special student scholarships to be awarded for the school year 1926–27 must be made to Professor William Emerson at 491 Boylston St., Boston, on or before April 12, according to announcement by the Department. These scholarships, amounting to $300 each, will be awarded to young men between the ages of 21 and 28 who, through two years or more of office experience, are qualified to take the work in the third or fourth years of design. Announcement of details will be made in the next issue of the *Bulletin*.

Lectures by practising architects and their associates continue this year in the course on Professional Relations, of which Instructor Alexander S. Jenney is in charge. Lectures by C. H. Blackall of Boston and by Clinton H. Blake, Jr., of New York have so far been given. Mr. Blackall, who is a member of the firm of Blackall, Clapp & Whittemore, spoke on December 2 on "The Architect and Public Service." Mr. Blake, the author of that indispensable volume, "Law of Architecture and Building," spoke two weeks later on "The Architect and the Law."

In the first conjunctive week-end problem of this academic year (held November 27–30), between Harvard, the Boston Architectural Club and Technology, the William E. Ware prizes, amounting to $50 and $25, were captured by Marjorie Pierce, '23, and N. L. Flint, '26, respectively. The subject was "A Tourists' Hotel in Florida." One of the Harvard entries succeeded in placing third with a Second Medal. In fairness to our competitors it should be stated that nineteen Technology students and Alumni competed in this problem as against three men from the club and five from Harvard.

In the last B. A. I. D. competition in which Technology was entered, together with most of the prominent architectural schools of the East, two out of four First Medals awarded fell to the lot of Institute men. The winning designs were presented by N. L. Flint, '26, and W. E. Campbell, '25. The subject for this long problem, which lasted from October 24 to December 7, was "A Synagogue." Professor Jacques Carlu served on the jury, during the judgment which was held in New York. The Institute Department also gained two Second Medals and five First Mentions, which was accounted as altogether a most gratifying showing.

Water colors, lithographs, etchings, wood cuts, and drawings made by the Alumni of the Department will form an exhibition to be held during this month in Rogers Building. Invitations have been sent to a large number of graduates requesting them to contribute appropriate examples of their work. To judge from the considerable amount of talent for expression in the graphic arts that is to be found among the Alumni of the Department it may be hazarded that the exhibition will be a large one and that it will attract many visitors, to a consequent stimulation of their interest in the work of the Department.

The latest periodic inspection of the Department by the Corporation of the Institute took place on January 6, the morning of which was spent in acquainting the members of the Corporation with the work being done in Rogers Building and with proposed changes and innovations. Among the questions considered were the possible limitation of enrollment, the adoption of more intensive methods of teaching, the creation of new options, the advantages of keeping the Architectural Department in Boston, and the possibility of bringing instructors from Cambridge to the Rogers Building to give courses in English, French, Mathematics, Applied Mechanics, and so on, instead of sending the students of the Department to Cambridge for instruction in these subjects.

Alumni News

John Howard Raftery, '24, winner of the 1925 Traveling Fellowship in Architecture, has been forced by reason of his serious illness with infantile paralysis to return to this country for treatment and rest. He arrived back just before Christmas and is at present undergoing treatment in Chicago. From latest hopeful reports he is expected to recover and will resume his study upon regaining his health.

William Meissner, '20, wrote to Professor Emerson from Nice in November, after touring Italy.

"Whereas in the past it has always been too difficult to find time to write, in Nice letter writing seems to be the one sensible thing to do. Some day, therefore, I shall probably be thankful, even for having been in Nice!

"My trip abroad is now almost over. Nine months

have passed as no nine months ever before have passed. As for letters, I have written only a few brief notes — to my family — I hope this shortcoming will not be taken for neglect entirely.

"The two and one-half months just spent in Italy have been the most wonderful of all. Despite tourist-ridden centers, unending Fascist demonstrations, and heartless swindlers, Italy is a glorious country. And its architecture everlasting.

"If French Gothic is more perfect construction, then the artfulness of Italian Renaissance makes for equal greatness. Nowhere have I seen simple forms of masses and planes more pleasing in shape and proportion than in Italy.

"I made the usual number of 'discoveries.' Among them are most of Vicenza and the church of St. Stefano in Bologna; the latter entirely unknown to me. This may be an admission of gross ignorance of architectural history, but I think the thrill was great coming upon them as I did. The same is true of that wonderful little church of St. Costanza in Perugia.

"I was fortunate to meet Sam Chamberlain and his very charming wife in Paris and to see some of the masterly work that Sam is now doing. I met many others: Don Parkinson and his wife in Paris; John Moore, cousin of Mr. Delano, at the Ecôle in Paris; Hunt, this year's winner of the Le Brun fellowship, in England; Amon at Fontainebleau, and Brookfield, who is touring Europe with his wife, in Florence.

"I spent the first month in Paris. Then followed a short trip through Belgium and Germany. Then I set out from Paris on a tour of northern France on a bicycle. I pushed it for six weeks through Normandy, Brittany, and Touraine. Quite apart from architecture it was an experience. It would have been ideal but for the poor roads; Touraine excepted.

"After that I was in England for a month. Finally from Paris I went south through Switzerland to Italy.

"Now I have less than one month which I propose to spend in southern France rather than to go to Spain. Three weeks for all Spain at this time of the year does not seem wise. There will be all the more reason for coming abroad again soon.

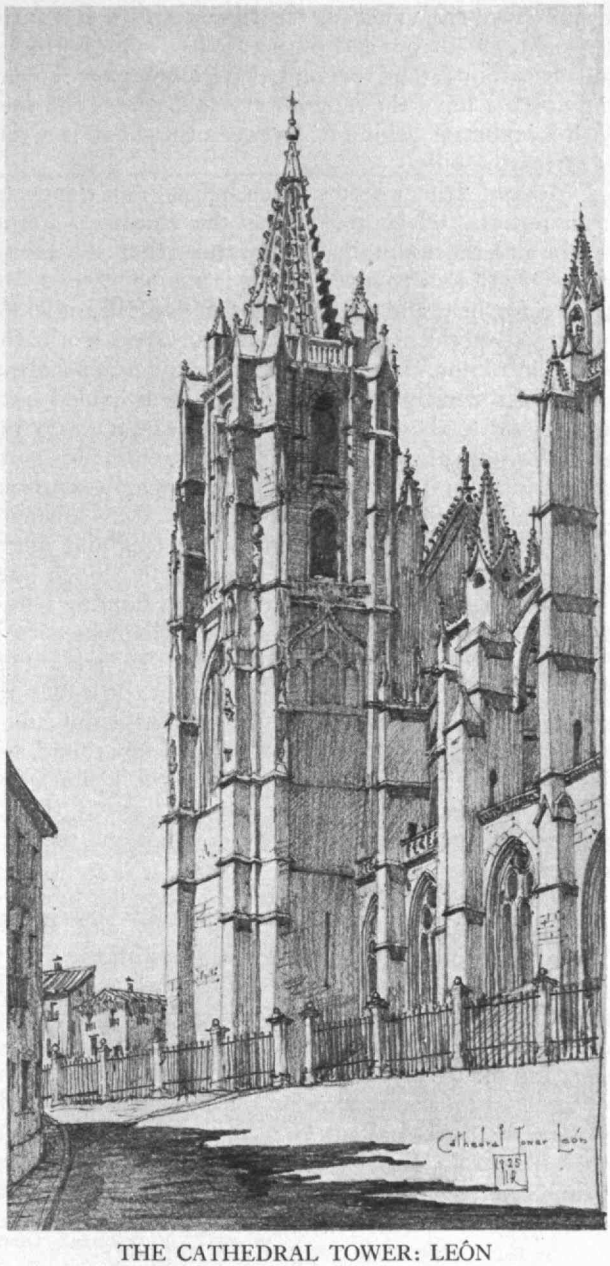
"My drawings are mostly pencil sketches. Water colors, for one thing, drained time too heavily. Quick sketches to keep the hand in training and to impress a subject on one's mind seems to be the most worth-while way to work.

"Before sailing I was given an itinerary by Wurster, one of the men in the offices of Delano and Aldrich, about a year ago. It proved to be so useful as a time and money saver, and contained such valuable information, that it now seems quite indispensable.

"I had thought of revising his itinerary on return after Christmas to include this year's data for the fellows who are planning a similar tour and who care to take advantage of this information.

"If you know of anyone who cares to have this information I shall be glad to let him have it."

William V. Cash, '24, winner in that year of the Department Fellowship and who, through the new cooperative agreement between the American School of Classical Studies at Athens, and the Institute, was appointed as a resident student at Athens for this year, is now pursuing his studies in Greece. Portions of two of his letters to Professor Emerson are here quoted:



THE CATHEDRAL TOWER: LEÔN

One of a series of pencil sketches by Isador Richmond, '16

Letter of October 14, 1925

"I arrived in Athens from Trieste, where I went by rail from Venice in order to get the earliest boat. The trip was rather a let-down after Milan, Vicenza, Verona, Padua, Como, Lake Maggiore and Venice. The second-class accommodations were excellent, and the ship spotless, but for the benefit of students I should say very expensive. The three-day trip cost little less than the seven-day trip across the Atlantic. Next trip I shall try the deck passage just for fun — I shall try to get off for Sicily and Constantinople some time. But the great thing is that here I am, near the venerable Acropolis, very comfortably and pleasantly situated. Toward the

East I have the valley of the Ilissos with a Byzantine style church surrounded by needle-like cypress trees in the foreground, and beyond, Mt. Hymettos. Toward the north I have the new library just across the road, with Lycabettos behind it. Between these two is a vista of retreating hills.

"Modern Athens seems much better than I expected from reports. Of course I miss the charm of French towns and the fountains and statues that the French know so well how to place. Yet it is a good town in spite of its glare, heat and dust; and if you don't like it so well just step into the museum and see fine Greek works that you didn't know existed. Within a fortnight a fisherman casting his net by the bay of Marathon hauled out a bronze statue about four feet high. I saw it today in a private studio of the Museum where an old fellow had it placed in a tank of water and was lovingly scrubbing away the barnacles that encrusted it. And it's a beauty, almost complete. In fact, only some toes and fingers are gone. It is not of the grand period, but much later.

"Though I was rather played out on Sunday I went up on the Acropolis just the same. It happened to be raining, which, however, was rather an advantage. Those columns are so warm in color that the leaden sky appeared blue between them. Their color is difficult to describe, as well as their appearance, which, to me, held something of ghostliness. There is nothing matter-of-fact about them; they are creamy and soft. I think I shall go up tomorrow when the sun is hot and see what happens.

"Though I arrived a week late it made no difference since Mr. Hill, the Director, was away and arrived yesterday, Monday. I have received preliminary directions from him and am to proceed to work at once. The day after tomorrow I shall go to Corinth where I shall live in the shadows of the old temple, when they are long, and make drawings of the excavations there. This will prevent me from following the custom of taking the trips of the School about Greece, which I should very much like to do. But Mr. Hill suggests that from time to time I may make trips to interesting places and relieve the strain of drafting. So by the time this reaches you I shall be out there with the past for company."

Letter of November 24, 1925

"There are four Doric temples that attract me just now and when time permits I shall study them more. The policy is to have one make drawings of certain buildings that have been excavated at Corinth but as yet not taken up by any former student, so that my own enthusiasms must come afterward and during spare time, as it were. Of these buildings, I am now studying two which may prove to be of great interest, though in plan they are simple. One is a stoa, about 150 meters long, of the Hellenistic period. Its fragments are very difficult to find and may be equally difficult to establish since they have been restored, demolished and restored again so often. The other is the Peribolus of Apollo, so-called from the account of Pausanias who gives us its approximate location. This building is merely a square open space surrounded by a colonnade, but its materials and details are admirable since it is constructed of white marble, and the floor is very beautiful mosaic. It is later than the other since it dates from early Roman times. While collecting data for this work I also keep abreast of the excavations that have been going on this fall by making a plan of the walls as we go down. At the top we find modern Turkish remains, then Venetian, Frankish, Byzantine, Roman, Greek, and even, at times, prehistoric sherds.

"The work is entirely outdoors except when the rain drives me in, for I make survey and do most of the drawing on the job. In fact I am actually roughing it here. I have never returned to Athens since I left there three days after arriving. This is the worst time of the year for working in the fields, however, and the weather may drive us back to Athens very soon. The first snow has fallen on the mountains nearby, and Parnassus has a white cap. It gets very cold here, but a lemon and an orange tree bear fruit in the yard, and there are blossoms by my door. It would be too much to go into all the details as I should like to, but I can sum it up in saying that in Greece good sanitation, good food, and good beds are rare. I believe that though conditions are very primitive here at the excavations, I live better than is possible elsewhere in Greece, outside Athens. You spoke of exercise, and I am sure I get enough these days in scrambling about these old dirty walls. Now and then I tumble in, or have the skin taken off my shins by falling rocks. It is, however, good training in excavation for I can check up the story from day to day from the coins, sherds, graves, or the character of the wall itself. In France we thought the Eighth Century a remote period. But here we practically despise that time of which we find hundreds of coins. Here you develop a taste for more distant epochs. At meal times, and between, I hear about the millenniums, the Helladic ages, pre-Mycenean times, and my pockets are full of sherds of all of them, my table is strewn with them, the fields and the hills are covered with them! One gets the habit of gathering them in you see. There is an interest in the thumbprint of a potter who worked thousands of years before Christ."

Other recent graduates who are enjoying the benefits of European travel and study are C. H. Muhlenberg, Jr., '22, and Gates W. Burrows, '25. The latter sailed in December and will be abroad for a period of one year.

Since sending out the bills for dues payments to cover the present academic year, the Secretary-Treasurer has been most gratified to receive a flood of checks and money orders sufficient in number to guarantee that the Society will end the year without its customary deficit. Perhaps this condition was inspired by the offer of a set of Chamberlain sketches of the Institute buildings or perhaps it is due to an increasing interest in the Department on the part of the Alumni. Whatever the explanation may be the Secretary-Treasurer is happy at the prompt response with which the bills were greeted. The Chamberlain portfolios will be in the mails, addressed to each and every dues-paying member, not later than February 10, and it is confidently expected that none of those who receive them will have occasion to be disappointed.

News from the Alumni Clubs

Washington Society of the M. I. T.

DR. RICHARD MULLER, formerly consulting engineer for the government of Ecuador, addressed the Washington Society of the Massachusetts Institute of Technology at a luncheon on Friday, December 11, at the University Club of Washington, D. C. Dr. Muller's subject was: "The Experiences of an Engineer in Ecuador," and his talk was most interesting because he described conditions which are very remote from an engineer's ordinary experiences in this country. He told the audience how, in Latin America, the engineer is thrown upon his own resources of knowledge and imagination, confronted with problems which are sometimes to be solved in a reversed order from similar problems in this country; and he illustrated this by a description of how he was furnished with material for a pipe line and had to search for a topographical profile to accommodate it. Such problems are sometimes met with, Dr. Muller said, because in many instances the interested parties have "a blind reliance in catalogues of materials and machinery in a way which leads them to believe that an engineer's services can be dispensed with altogether."

Dr. Muller also spoke of his experience in the jungle where, as a government engineer, he had charge of the construction of a bridge. There he had to play the rôle of physician of the camp, that of peacemaker, of a judge in robbery and as preacher to prevent dissension and discouragement among his men. The address was instructive, especially to those who have their occupation in great civilized centers. It revealed how an engineer, isolated from civilization while on duty, may be pressed for food to the point of having to eat the meat of monkeys and tigers. His description of Ecuador was no less interesting, for he reminded the audience that the potato was first discovered in that country by the Spanish Conquistadores, and rubber by La Condamine. "It is a country," said Dr. Muller, "where the traveler may behold the entire vault of heaven, from the guiding stars of the constellation of the Bear to the Southern Cross; it is a country whose shores are bathed by two ocean currents, one cold and the other warm; the Humboldt and Mexican currents; a country where all the climates of the earth are staged one above the other from tropical heat to perpetual snow; a true image of a half of our planet, were it sliced at the equator. Furthermore, Ecuador was the scene of classical astronomical operations during the Thirteenth Century, for, if Columbus proved to the world that the earth was round, it remained for the French Academy of Sciences to send a commission of astronomers to Ecuador in 1732 to determine with accuracy and for the first time the size of our planet. Finally, Quito, the capital of Ecuador, is the oldest capital of any nation in the western hemisphere, and contains a University fifty years older than Harvard. Ecuador is a country where all meteorological phenomena occur with such regularity that there, as Humboldt has remarked, "the barometer may be used as a clock."

W. M. CORSE, '99, *Secretary*,
706 Otis Building, Washington, D. C.

Technology Club of Mexico

We held our second meeting at the Café Colon on Friday night, December 11, and the first thing we did at this meeting was to adopt a Constitution along the lines suggested by O. B. Denison, '11. It was decided that the term of office for a secretary and treasurer should be two years, other officers being elected annually. Our annual meeting will be held on the first Friday in September, and dues for the Club will be two pesos ($1.00) a year. Five members will constitute a quorum.

We ratified the selection of M. S. Vallarta, '21, who is a Research Associate at the Institute, to represent us on the Alumni Council, and considerable time was spent in discussing Dr. Vallarta's letter of December 3 regarding the Technology center in New York as presented to the Council at its November meeting by T. C. Desmond, '09, of New York. It was unanimously expressed that anything would be better than the present Club. We are all very keen to see a Technology Club in New York in keeping with the usual standards of the Institute, and any move in that direction seems worth while. As for the personnel service work to be carried on there we felt that this should be decided by those closer to the work than we. Those present at the meeting discussed Plans for "attending" the Phantom Radio Dinner and we will try to be with you on January 19. It was also decided at this meeting that it would be wise to send out questionnaires to obtain information concerning our members with the idea of publishing a directory.

WILLIAM R. SCOTT, '22,
Secretary,
Ingersoll-Rand Co., of Texas,
409–10 Edificio Palavicini-Bucareli No. 12
Mexico, D. F., Mexico.

Technology Club of St. Louis

The total activity of the St. Louis alumni this fall has consisted in two very interesting luncheons given at the City Club for visiting professors. The first took place on October 20 when Professor Prescott was our guest. There were fourteen of us at the table and we enjoyed hearing of the more recent changes and additions at the Institute.

The second luncheon was held in honor of Professor Norris who had some very interesting and entertaining things to tell us about his year in Europe and his impressions of midwestern universities on his present trip across the country. This affair was very

Stated Meetings of Local Associations

ATLANTA	*Luncheon: Fridays at 12.30 p.m. at Ansley Grill*
BALTIMORE	*Luncheon: Thursdays at 12.30 p.m. at Engineers Club*
BIRMINGHAM	*Luncheon: Second Tuesdays at 1.00 p.m. at Tutwiler Hotel*
BUFFALO	*Luncheon: Fridays at 12.30 p.m. at Chamber of Commerce*
CHICAGO	*Luncheon: Tuesdays at 12.30 p.m. at Electric Club*
CINCINNATI	*Luncheon: Tuesdays from 12 to 2 p.m. at Hotel Havlin*
CLEVELAND	*Luncheon: Thursdays at 12.15 p.m. at Grebe's Rathskeller*
DAYTON	*Luncheon: first and third Saturdays at Noon at Engineers Club*
DENVER	*Luncheon: Joint Luncheon with Engineers Council monthly*
DETROIT	*Dinner: First Mondays at 6.30 p.m. at University Club*
HARTFORD	*Luncheon: Second and Fourth Thursdays at Hotel Bond*
INDIANAPOLIS	*Dinner: Third Fridays at 6.30 p.m. at University Club*
LOS ANGELES	*Luncheon: Every Friday Noon at University Club*
MILWAUKEE	*Luncheon: Thursdays at Noon at University Club*
PHILADELPHIA	*Luncheon: Thursdays at 12.30 p.m. at Wanamaker's Tea Room*
PITTSBURGH	*Luncheon: Fridays at 12.30 p.m. at Chamber of Commerce*
SAN FRANCISCO	*Luncheon: Fourth Tuesdays at Noon at Engineers Club*
SEATTLE	*Luncheon: First Wednesdays at 12.15 p.m. at College Club*
SHANGHAI	*Luncheon or Dinner: First Tuesdays, alternating between noon meetings at Carlton Café and evenings at Union Club*
TOKIO	*Supper: First Wednesdays at 6.00 p.m. at Imperial Hotel*
WASHINGTON	*Luncheon: Fridays at 12.30 p.m. at University Club*

well attended and everyone showed a desire to get the more intimate facts about the present policies of the Institute, chiefly with regard to new methods of handling the educational problems of the students.

Everyone has expressed the desire to persuade President Stratton to visit the Alumni Clubs in the near future. We hope that St. Louis will not be neglected in this respect. The interest of the alumni here is very keen. Such visits from the Faculty as we have had tend to keep it so.

Our officers at present are: Leslie Dana, '94, President; Lyall Stuart, '21, and John H. Locke, '08, Vice-Presidents; and L. B. Van Da Linda, '18, Secretary and general life of the organization.

JOHN T. RULE, '21, *Correspondent*,
1210 Fullerton Bldg., St. Louis, Mo.

The M. I. T. Club of Akron

The last meeting of the Akron Technology Club was held Monday evening, December 14, at the University Club. It was the last meeting of the year and a large majority of the members were on hand when the dinner bell sounded.

The Committee had arranged for Martin L. Davey, Representative to Congress from the 14th Ohio District, to be the speaker of the evening, but he was forced to disappoint us at the last moment. This bit of hard luck was not permitted to spoil the evening. The Akron Technology Club has a knack of furnishing its own entertainment and doing it well, so no one went home disappointed.

The principal business transacted was the election of the following officers for 1926: Burgess Darrow, '11, President; Parry Keller, '15, Secretary-Treasurer; R. T. Haslam, '11, Representative on Alumni Council. Darrow is development manager of The Goodyear Tire and Rubber Company and is very widely known in the rubber industry. Keller, who is serving his second year as Secretary-Treasurer, is a member of the Development Department of The Goodyear Tire and Rubber Company.

The following Committee deserves the credit for the success of the meeting: H. E. Morse, '15, Chairman, A. W. Carpenter, '13, C. W. Greening, '22, George Heathman, '22, and H. H. Spengler, '22.

It is gratifying to learn that two of our members were recently elected officers of the Akron section of the American Chemical Society, R. P. Dinsmore, '14, as Chairman and W. J. Kelly, '09, as Secretary. Dinsmore is chief chemist of The Goodyear Tire and Rubber Company, and Kelly is in the Research Department of the same company. Both are very active and prominent in the affairs of the American Chemical Society and their election as officers is a well-earned recognition of their active interest.

PARRY KELLER, '15, *Secretary*,
Goodyear Tire and Rubber Co., Akron, Ohio.

Technology Club of Philadelphia

The Technology Club of Philadelphia held the third meeting of the year in the Maine Woods Room of Bookbinder's Café. A New England shore dinner was served which would rival any to be procured along the coast of the Bay State. We were most fortunate in having with us on this occasion one of the most prominent members of the Club, Elisha Lee, '92. Mr. Lee introduced the speaker of the evening, Robert H. Binkerd of New York, Vice-Chairman of the Eastern Railway Conference. Mr. Binkerd gave us a very interesting talk and enlightened all present in regard to recent accomplishments of the railroads of the country.

The program of the evening was varied. With the exception of a few games of chance every article of all laws, federal, state and municipal, were strictly adhered to. This statement also includes the Volstead Act. The prizes offered in the aforementioned games were, a free dinner, Christmas turkey, and five souvenirs of the Institute. The proceeds of these games were turned over to the fund for reclaiming the *U. S. S. Constitution* now lying in waste at the Charlestown Navy Yard. The meeting was one of the gayest held by the Club in many years.

Due to the activities of the Crew Levick Company in obtaining an efficient organization the Club has lost the services of a very devoted and active member. The company recently decided to transfer John Salloway, '23, to Titusville, Pa., in the wild and wooly oil regions of the Keystone state. John was born and raised in Boston and has spent all his life in big cities. We are wondering how he will survive in a small town, 175 miles from anywhere.

On Tuesday, December 29, a luncheon is being planned for the students at the Institute, residing in metropolitan Philadelphia. We are proud to say there are eighty-nine such students and we are planning for a large gathering.

H. ARTHUR GROSSCUP, '20, *Secretary*,
S. E. Corner 5th & Race Sts., Philadelphia, Pa.

M. I. T. Alumni Association of Nashville

At its December meeting the Executive Committee of the Alumni Association accepted the request of a group of alumni in Nashville and authorized as a regular local branch the M. I. T. Alumni Association of Nashville, Tenn. Although our records show not more than fifty alumni in Tennessee, many of them are in and about Nashville, and a group of them got together at a dinner early in December, elected a set of officers, and at once made application for recognition.

The pioneer officers of the new Club are Donald W. Southgate, '11, President; G. B. Howard, '12, Vice-President; and H. A. Burr, '13, Secretary-Treasurer.

H. A. BURR, '13, *Secretary*,
3515 Richland Ave., Nashville, Tenn.

Technology Club of Rhode Island

The Technology Club of Rhode Island has not held any meetings since notes were sent in for the last issue of The Review, so there is not much material to be forwarded at this time.

The Club has lost one of its most active members and ardent supporters in the death of Clarence L. Hussey, '09, who was bridge engineer for the State Highway Commission.

The next meeting of the Club will be held at the T. K. Club in Pawtucket on the evening of January 12. The meeting will be an informal dinner followed by a bowling tournament. The members are also planning to form groups to sit together at the banquet of the Providence Engineering Society in February.

I regret that the contribution to this section of The Review from the Rhode Island Club does not amount to more for this issue and hope that we will have more notes for publication in the March Review.

L. E. KNOWLTON, '16, *Secretary*,
Providence Gas Co., Providence, R. I.

Technology Club of Chicago

The Field Archaeological Expedition announces the interesting discovery that although your Secretary has been buried for some time he is not dead. The body was found under a mountainous pile of small cards which appeared to be an index of Who's Who in Chicago but on further investigation it proved to be the "copy" for the new Technology Club Directory which is now in the hands of the printer. The erroneous identification of the index was not unwarranted for a complete check of the Who's Who and the Directory revealed the fact that Red Grange was the only individual who was not common to both.

Only the heroic efforts of Professor Zizziter, Head of the Department of Mythology at Technology, were able to restore the Secretary to consciousness. On being revived he talked freely of an outing of the Eastern College Association at Budlong Woods in September at which local alumni of Technology, Dartmouth, Cornell, and so on, had a thoroughly enjoyable time. Golf, baseball, track and field events and stunts were on the program. If the weather man had made known his intentions in advance it would have been quite feasible to include a couple of crew events. However, it was decidedly not a "water" carnival.

Plans somewhat tentative at this time are under way for a smoker or dinner dance in connection with the All-Technology Phantom Dinner on January 19. National speakers will broadcast from New York on that night and local alumni organizations throughout the country will listen in somewhat on the order of the famous Telephone Dinner in 1916.

Every Tuesday noon at 12:30 you will find a good bunch of Technology fellows, and a good luncheon at the Electric Club at 30 North Dearborn St. Start the New Year right and tighten up some of those 'Stute associations that are in danger of being lost.

JAMES F. DUFFY, '11, *Secretary*,
A. E. White & Co., 19 South LaSalle St., Chicago, Ill.

Technology Club of Florida

At last the Florida Club has revived enough to sit up and take nourishment. We had a dinner last night, Friday, December 18, at the Canton Restaurant, and there were five members present with their guests. Those present were Dr. and Mrs. Arms and daughter, Mr. and Mrs. Parker, Raymond Cushman, '16, B. F. Powell, '23, from Colorado, Miss Henrietta C. Dozier, '99, Miss Elizabeth Dozier, and Julian Brasch, '22.

Everyone seemed to enjoy the evening and voted to repeat it around Easter. I shall, however, try to get up one for January 19. It might be possible to have separate gatherings in the different cities, if not a general one. I will see.

HENRIETTA C. DOZIER, '99, *Secretary*,
706 Bisbee Building, Jacksonville, Fla.

Technology Club of the Merrimack Valley

A meeting of the Technology Club of the Merrimack Valley was held Thursday, December 18, at the Shawsheen Manor in Andover. There was an attendance of thirty members and undergraduates. Horace Ford, Bursar of the Institute, gave one of the best after-dinner talks on the affairs of the school that the Club has heard. Harry Boardman, general manager of the Tech Show, made a spirited appeal for support of the Show by the alumni. It was voted to bring the Combined Musical Clubs to Lowell on Friday evening, February 12. The following Committee was appointed to take charge: C. O'Donnell, '21, John H. Lambert, '98, John F. Sawyer, Professor Edward Barker of Lowell, and John F. Alter, '11, and Edward Praetz, '21, of Lawrence. William C. Ready, '21, of Lowell, was elected general manager of the affair.

WILLIAM C. READY, '21, *Secretary*,
10 Bertha St., Lowell, Mass.

Technology Club of New York

Plans are rapidly crystallizing for one of the most notable Technology dinners ever held in the Metropolitan District of New York, or, in fact, in the entire country. The Massachusetts Institute of Technology Phantom Radio Dinner is scheduled for Tuesday evening, January 19, at 7 P. M. at the Waldorf-Astoria Hotel. The dinner will be held in conjunction with similar Technology dinners all over the United States. A great deal of time and effort has been spent in making this dinner the most notable affair of its kind. Large broadcasting stations all over the country are to be tied in, thereby assuring Technology men in remote parts of the country of hearing the prominent speakers.

A series of very interesting entertainments have been mapped out for the coming winter season at the Club. The first of these entertainments was given on Friday, November 13, when Allston Dana, '08, presented in a very effective way some of the problems encountered in the building of the new Delaware River Bridge between Camden and Philadelphia. Dana was assistant engineer of design in the construction of this famous structure.

On Friday evening, December 4, Oscar de Lima Mayer, '19, gave a very interesting talk on his experiences during a recent trip in South America, during which he crossed the Andes Mountains and worked his way down the tributaries of the Amazon.

The Technology Club has had several calls from members of the traveling fraternity. A. F. Bennett, '03, has just returned from a trip to Bolivia, South America; and T. S. Killion, '11, is stopping at the Club, having just returned from twenty months in Australia and the Orient.

DUNCAN R. LINSLEY, '22, *Secretary*
Harris, Forbes & Co., 56 William St., New York, N. Y.

Technology Club of Fall River

President Haffenreffer was host to the Club members on Friday evening, December 14, the meeting being held at his bowling alley on Prospect Street. About thirty members and guests listened with great interest to Dr. Dewing of Harvard, who gave a talk on the future of New England. He stated that this section must change its methods of doing business if it is to maintain the ascendancy in the many lines of industry in which it has been supreme in the past. Dr. Dewing, in comparing the cotton industry in New England and in the South, stated that although the South had the advantage of longer hours of labor at the present time, this section had the advantage of better managerial ability.

Denny needed no introduction to the Club members and received a very hearty welcome. His figures showing how the registration at the Institute is seeking its level were of great interest to all, while his comedy song skits at the piano put every one in the best of humor. Technology songs were sung with much enthusiasm and plenty of spirit. It is even claimed that Johnny Coldwell became so animated that his bowling score was much higher than usual.

Refreshments were served, self-service being the order of the evening. It is needless to say that these refreshments were very well received. All members of the Club agree that great credit is due to President Haffenreffer for the pleasant and efficient manner in which he handled this meeting.

ALDEN D. NUTE, '17, *Secretary*,
345 Pearce St., Fall River, Mass.

Niagara Falls Technology Club

We had a highly successful Christmas party and club meeting just before Christmas and the gang, after partaking freely of Ned Pollard's Canadian cocktails, revivified the tradition which has been existing here for a number of years, with successive duos as participants, by electing Raymond Ridgway, '20, previously Secretary, to the office of President, and Harry Noyes, '90, previously President, as Secretary. This complies with an important provision in our Constitution and continues to prove that one good turn deserves another.

At the business session the resignation of A. M. Cook, '08, as our Council Representative was accepted and in his place was nominated Bill Flanders, '13, formerly one of our active members but now back in his home town of Lawrence, Mass.

The men present were practically unanimously opposed to the New York proposition as outlined in the original letter. The main points brought out in the discussion, which was pretty general, were that the place for the Alumni Secretary, The Review, and the Division of Industrial Coöperation and Research is in Boston in direct contact with the Institute; that the advantages of New York as the metropolis to Technology men was more fancied than real; that it would be very unfortunate if any other place than the Institute should be headquarters for the Alumni. Since our meeting we have at hand, of course, the modified plan, as outlined in the report of the December Council meeting and it is not known just how our members will react to this, but their stand on the original proposition was unequivocal.

The proposal was introduced to have monthly luncheons at the Niagara. A number expressed themselves to the effect that it was much better to have an evening meeting such as that in progress when the joy would be more unrestrained and of greater length. Bill Read, '09, therefore, made a proposal that we have monthly noonday luncheons at night. This motion was unanimously carried and the President appointed Read to engineer these unusual feasts.

We then underwrote the Buffalo Tech Show budget to the extent of more than $250, for which charitable act we are to have a share in the scholarship fund to be raised. We expect a number of our members and their families and friends to attend the performance of Tech Show, 1926, in Buffalo on the evening of February 3.

RAYMOND R. RIDGWAY, '20, *Secretary*,
Norton Co., Niagara Falls, N. Y.

Southwestern Association of M. I. T.

The Southwestern Association of M. I. T., with headquarters in Kansas City, held the third luncheon of the season at the Kansas City Club on Tuesday, November 10. It has been our aim to bring the Technology men of Kansas City together for an informal meeting as often as feasible, which, so far, has been once a month. The November luncheon showed the best crowd that we can report this year, for there were sixteen grads present. Not only was this meeting ahead of previous ones in point of numbers, but every one felt that, for an informal get-together, it was very successful.

At every meeting there are some who are always on hand, such as Hermann C. Henrici, '06, of the Henrici-Lowry Engineering Company. Then, too, it frequently happens that new faces appear. This time three men arrived who had not been around before. It was only on Tuesday morning that J. W. O'Brien, '18, walked into my office to get acquainted, shortly after arriving in the city. It was a pleasure to ask him to come to lunch that very noon. Others who were present for the first time included Captain H. L. Robb, '21, and G. W. Hall, Jr., '23.

ELTWEED POMEROY, '23, *Secretary*,
210 Land Bank Bldg., Kansas City, Mo.

News from the Classes

News from even-numbered Classes is published in issues dated November, January, March and May. News from odd-numbered Classes is published in issues dated December, February, April and July. The only exceptions to this rule are those Classes whose Secretaries have guaranteed the appearance of notes in every issue. These Classes are: 1895, 1896, 1900, 1901, 1902, 1905, 1907 and 1910 to 1925 inclusive. Other Classes adhere to the alternate schedule. Due to necessary limitation of space, The Review is unable to publish lists of address changes of members of the Association. The Alumni Office, in Room 3–209 M. I. T., will supply a requested address or will act as the forwarding agent for any letters addressed to members of the Association in its care.

'75

Once more I have to note the deaths of some of our classmates. Fred C. Bowditch died on October 7, and R. H. Cushing on December 7. Bowditch was with us three years but had never been active in class affairs. He was a son of William I. and Sarah R. (Higginson) Bowditch, born in Brookline, Mass., and had always lived there. He was President of the Conveyancers Title Insurance Company with offices at 30 State St., Boston, for many years. He married Elizabeth Forster, who, with five children, survives him.

Richmond Hersey Cushing, connected with the Class during our first and second years, was a son of Andre and Delia (Rich) Cushing. He was born in the parish of Lancaster, County of St. John, Province of New Brunswick, May 8, 1853. He left Technology in 1873 and was engaged in railroad work up to 1901. From 1901 to 1907 he was Director of Public Works, Water and Sewerage for the city of St. John. For several years past he was a member of the New Brunswick Electric Power Commission, with headquarters at St. John. In June, 1889, he married Emeline Tattrie. Their children, Allston T., '11, George B., Helen G., Hazel R., and Richmond H., all survive him. I understand that Cushing had a shock of paralysis on October 28 and had been confined to his bed until the end.

E. A. W. Hammatt, *Secretary*,
South Orleans, Mass.

'77

John Ernest Hardman, who was born in Lowell, Mass., April 27, 1856, died recently. He was educated in the Lowell public schools, graduating from Lowell High School in 1873, when he entered the Massachusetts Institute of Technology. He showed most excellent ability in scholarship all through his school life and ranked high in his work at the Institute. Of quiet disposition, he was a most genial person to meet and he was a favorite of both classmates and professors.

After graduation in 1877 he was assistant to Professor W. R. Nichols. In 1877–78 he went to England, France, and Germany to study water analysis. In 1879 he was with the American Mining and Smelting Company at Leadville, Colo. From 1879 to 1880 he built the Boston Reduction Works at Red Cliff, Colo., and the next year he leased the Chicago Reduction Works at Leadville. In 1882 he became interested in mining in Alabama and other southern states. In 1883 he leased the Baker Mine, Oldham, Nova Scotia, and until 1895 he operated as director and manager of various gold companies in Nova Scotia. In 1895 he was appointed to the chair of Mining and Metallurgy at McGill University, Montreal, from which he resigned to resume professional practice in 1897. He was appointed engineer to the British Columbia Land Exploration and Development Company of London, England. From 1897 until the time of his death he was in general practice as a consulting mining engineer at Montreal, Quebec.

He was elected President of the Gold Mining Association of Nova Scotia in 1888–89. In 1894 he was elected President of the Mining Society of Nova Scotia; he was made honorary member of the General Mining Association of the Province of Quebec, 1894; and was elected Vice-President of the American Institute of Mining Engineers in 1903. He was President of the Canadian Mining Institute for two years; and a Vice-President of the Canadian Society of Civil Engineers in 1907. He was a member of the North of England Institute of Mining and Mechanical Engineers; of the Federated Institute of Mining Engineers of Great Britain; of the Nova Scotia Institute of Science; and of the Mining Society of Nova Scotia.

In 1896 McGill University conferred on him the honorary degree of Master of Engineering. He was a busy man at all times, and he made trips from the Atlantic to the Pacific Coast on investigations of mine properties. He also made many examinations in British Columbia mines and reported on their condition.

He married Miss Elizabeth McArthur of Ottawa in April, 1895. She survives him.

Richard A. Hale, *Secretary*,
Essex Company, Lawrence, Mass.

'81

Our Forty-Fifth Reunion is next June. There will not be any special celebration by the Alumni Association, but we can have our good Reunion just the same. Our living membership of those whom we know, and who know each other, is as follows: Graduates: Abbott, Allen, Bissell, Briggs, Came, Chase, Collins, Cutler, Ned Lewis, Mower, Norris, Mrs. Ordway, Warren, Winslow. That is, fourteen in all. In 1916 we had twenty-one living, of whom nineteen were present. In addition to these, there are forty-five non-graduates, as follows: Ayres, Barnes, Blanchard, Bohlen, Brown, Cabot, Churchill, Miss Clark, Codman, Cole, Crocker, Dort, Emery, French, Frost, Kelley, Kendall, Langdon, Lawrence, A. J. Lewis, Libbie, Mansfield, Maxcy, Miss Minns, Munyan, Paine, Prouty, Revere, Richards, Rindge, Rogers, Rosenheim, Rosing, Sargent, Saville, Mrs. Sheldon (née Arms), J. E. Smith, G. H. Stearns, Stephenson, Sweet, Miss Walker, Wallace, Walsh, Miss Woodward, Zimmerman. In 1916 we had fifty living, of whom twenty-one were present.

Now all this means is: put it down now that *you* are coming to Boston the early part of June.

The Assistant Secretary will be pleased to make club or hotel arrangements for anyone and we also have a treasury fund: "You know me, Al." Let's get together in quantity, and, as usual, in quality. The fiftieth out is a long way off.

Frank H. Briggs, *Secretary*,
390 Commonwealth Ave., Boston, Mass.

'89

The Secretary is again obliged to record the passing of two of our classmates, a duty which lately has been required all too often. Charles L. Simpson died on September 24. Simpson has not been in this vicinity for some time but we had hoped to get him here last spring. The Kansas City *Times* had the following: "Charles L. Simpson, sixty years old, died of heart disease . . . at his home, 4525 Walnut St. Mr. Simpson was prominent many years in Kansas City real estate development, and was past President of the Kansas City Real Estate Board and of the National Association of Real Estate boards. Mr. Simpson was born in Lawrence, Kans., November 23, 1865, the son of Samuel N. and Kate L. Simpson. His father was an early Kansas settler who lived in Lawrence during the days of border warfare.

"Mr. Simpson was graduated from Massachusetts Institute of Technology in Boston in 1889. The next year he came to Kansas City and entered the real estate business, in which he continued up to the time of his death. He was President of the C. L. Simpson Realty Company, and had platted forty additions in Greater Kansas City.

"On January 5, 1893, he married Mary M. Gamble, granddaughter of Hamilton R. Gamble, who was appointed 'Civil War Governor' of Missouri by Abraham Lincoln. He is survived by the widow and two daughters, Mrs. Gilmer Meriwether, Jr., and Miss Hamilton Simpson, and a brother, Burnett N. Simpson."

George Basford died on October 26. The last letter was received

1889 Continued

from him May 19 in which he expressed regret at not being able to participate in the Reunion of last spring. The following is taken from an article in the Boston *Transcript:* "George M. Basford, famous as a railroad publicist and engineer and head of the G. M. Basford Company, 17 East Forty-Second St., New York City, dropped dead in the Jerome Avenue subway station in New York on Monday evening. Mr. Basford stood in the vanguard of railroad progress, and his position of leadership was universally recognized. It was said of him that there was no man, not excepting the chief executives of the country's great railway companies, whose death could mean a greater loss to the railroad industry.

"In addition to the Railway Signal Association, of which Mr. Basford was a charter member, he was a member of the New York Yacht Club, Lotus Club, Engineers' Club, New York Athletic Club, New Rochelle Yacht Club, American Society of Mechanical Engineers, and the New York Railroad Club and other railroad clubs in various parts of the country.

"His home was at 134 Primrose Ave., Mount Vernon, N. Y. He is survived by his wife, Grace Barker Basford, and two daughters, Mrs. Roger L. Wensley, who lives in Brooklyn, N. Y., and Miss Jean Basford, who is now in Paris. Mrs. Basford is now on her way to Europe, having sailed last Wednesday on the *Aquitania.*"

It is some time since the Secretary was privileged to chronicle a wedding in the Class and it is with much pleasure that he records the marriage of Arthur Williston to Miss Mary de Forest Denny, which occurred on December 9, at Dedham, Mass. All congratulations and best wishes!

Lewis Kunhardt, who is always to the front in good works, has come out with a well-printed pamphlet, illustrated with convincing maps and plans, regarding improvements in the plans for the Loop Highway, so called, which has been proposed as an alleged relief from Boston traffic conditions. Lewis' ideas are good and ought to be adopted if the Loop is to afford any relief at all.

Letters addressed to Joseph N. Bulkeley at Johannesburg, South Africa, have been returned. Can any one supply us with his address?

Denison has furnished the Secretary with an ominous looking set of statistics which set forth with startling distinctness the fact that only 26.8 per cent of the Class pay alumni dues, which makes the Class twentieth from the top and twenty-sixth from the bottom, a position of unbecoming mediocrity, totally at variance with '89's slogan of "doing her duty as usual." A general cashing in is desired and expected.

WALTER H. KILHAM, *Secretary,*
9 Park St., Boston, Mass.

'91

A Class Dinner was held on Thursday, November 19, at the University Club, Boston. The following were present: F. Campbell Moore, Young, Punchard, Fuller, Goodwin, Bowen, Bradlee, Blanchard, Palmer, Vaillant, Fiske, W. P. Bryant, Capen, Dana, Colburn, Forbes, Garrison, Howland, Tappan and Howard.

We were particularly pleased to have Barney Capen with us again. He is now getting around a little and is much better. Charlie Aiken was unable to be with us on account of the severe illness of Mrs. Aiken. They have been at their country place in Franklin, New Hampshire, all summer.

A nominating committee was appointed and the present officers were nominated and reëlected, namely, H. G. Bradlee, President; Henry A. Fiske, Secretary; and G. W. Vaillant, Treasurer.

Plans for the Thirty-Fifth Reunion were discussed and a special committee appointed to take charge of the Reunion. This committee, which consists of Bowen, Young and Garrison, will plan the work and nominate special committees to cover the various activities in connection with the Reunion.

It was suggested and agreed that another dinner be held in the Spring after the committee has worked out its plans, all to the end that we may make this Thirty-Fifth Reunion the best ever.

The Reunion Committee held a meeting on December 14 and the Reunion is to be held on June 11, 12, and 13 at East Bay Lodge, Wianno, Mass.

Various committees were appointed with the following as chairmen (A complete list of the members will be sent out shortly): Finance Committee, S. W. Wilder; Transportation, F. A. Wilson; Housing and Commissariat, Charles Garrison; Sports and Entertainment, F. C. Blanchard; Photographs and Souvenirs, Gorham Dana; Boston and Vicinity, H. C. Forbes; Western New England, F. Campbell Moore; New York and Pennsylvania, James Swan; Middle West, F. Clouston Moore; Pacific Coast, G. R. Hooper.

Keep these dates in mind: June 11 to 13, 1926.

At a recent meeting of the directors of the United Hotels Company of America a new department of operation was created, composed of George H. O'Neil, chairman; J. Linfield Damon, and Charles A. Carrigan. Supervision of the hotels embraced within the United States, other than the Roosevelt in New York City and the Benjamin Franklin in Philadelphia, was placed under the new department. A department of design, construction and equipment was placed in charge of Mr. Damon. Each was made a Vice-President.

Charlie Fitts has a son in Technology, Class of 1929. — Charlie Ricker of Havana is heading North for winter sports and a few weeks' holiday in New England.

Ninety-one is thirteenth on the list of percentage of paid members of the Alumni Association. We need only seventeen more paying members to be at the top. If you are a graduate, send in your dues, if not a graduate, send in your dues and become a regular member of the Alumni Association.

HENRY A. FISKE, *Secretary,*
Grinnell Co., 260 West Exchange St., Providence, R. I.

'95

Well, mates, we have heard from a few at least! Here is an interesting letter from Gerard H. Matthes: "I am back in New York after having been on the go pretty steadily since the latter part of July. I spent over a month on the Pacific Coast, mostly at home, in Hollywood, and devoted some time to business in San Francisco and Portland. Had a most interesting day in Santa Barbara viewing the havoc wrought by the earthquake, and could draw but one lesson from it: well constructed buildings have little to fear from earthquakes; shoddy construction cannot escape disaster. Sometimes the two extremes were found side by side. Architects do well to avoid the use of tile roofs and brick veneers. Tile and brick showers were common in Santa Barbara during the quake — and they were hard showers.

"In September I spent a week with my daughter, on horseback in the mountains south of Yellowstone Park, in what is known as the Jackson's Hole country and saw some wonderful mountain scenery. I used to consider myself a good horseman, but have to yield the palm to my eighteen-year-old daughter. Accompanied by her inseparable chum, an Eskimo husky, she rode in blue overalls and cowboy boots (the kind with the tall heels) and seemed to get comfort out of broncos.

"Together we visited the great mountain slide that took place in the valley of Gros Ventre River last summer, when over 10,000,000 cubic yards of earth and boulders slipped a distance of a mile and a half from a height of 2000 feet in less than five minutes. The valley was dammed to a height of 200 feet for about a mile and a half up and down stream, and a lake had formed back of the mass that was seven miles long. So great was the Mv^2 that the mass actually pushed up the hillside opposite to a height of 600 feet above the original valley bottom. The latter, in places, was scooped up and pushed up the hillside. I saw part of the old river bed perched about 400 feet above its old level, dry as a bone, with the beaver-gnawed stumps still lining it. Such is nature in the making — except that the usual process was slightly accelerated this time.

"I spent Labor Day in the Rockies near Denver and enjoyed seeing nature being made over again by the hand of man. I refer to the wonderful highways of Colorado built of recent years. A most ordinary sightseeing bus took me to an elevation of 11,300 feet without the motor getting hot.

"Following my western trip I spent a month in Cuba, mostly at Havana. I am strong for doing in Rome as the Romans do, but in Cuba I did not always succeed. However, I liked the people, the climate, (except in the middle of the day), enjoyed swimming at Marianao Beach amid the angel fish — real honest-to-gosh fish, Luther — and feasted on cocoanut water, avocado pears, and a great variety of seafood, and should not forget to mention the product of Havana's best breweries. I had not tasted anything to equal it since leaving Europe thirty-five years ago.

"I got to see something of Florida and its main boom-center, Miami, and came away greatly disappointed and disillusioned. Florida is the most over-rated place in this world today. When one considers that the number of lots there in private ownership is so large that with a small bungalow on each lot and three persons to each bungalow it will take one-fifth the population of the United States to make each lot-owner happy, it is not difficult to guess that most of the small investors may well consider themselves stung from the start.

1895 Continued

"From Cuba I journeyed to Montreal and Ottawa, late in October, and the change of climate was no myth. Too many degrees of latitude in one jump for comfort, but as I had to speak before the convention of the A. S. C. E. there was no escaping it and I suffered it through. I spent about a week with Francois in Washington recently and in so doing missed the '95 luncheon in New York arranged by Canfield. Will try to do better next time. With best regards —"

E. J. Loring is still on the job in Washington, working on the development of bombs and matters of similar nature. Loring is about the only man in the country today devoting his entire time to this subject. — Frank C. Schmitz of New York has recently undergone an operation for appendicitis and we hear he is convalescing and will be ready to step out again early in 1926. Glad Frank "got thru."

Frank T. Miller is now serving as Receiver for the Boston and Worcester Street Railway Company. — We have learned of the marriage of George Shepard during the early summer. — It is reported that George Hayden, who has been for a long time with the New England Telephone and Telegraph Company in Springfield, Mass., has been transferred to Boston. — W. A. Hall is now associated with Haven and Hopkins, engineers, of Boston. — H. C. Whorf has a son, John, who has become quite celebrated as a water colorist. A very attractive exhibition of his work was recently held at one of the galleries in Boston.

Tom Booth has a son who has just graduated from Technology and is now associated with the Aetna Fire Insurance Company. — Dan Abercrombie, who was so long associated with the Street Railway, Greenfield, Mass., is now located in Boston with his family and is connected with the firm of E. H. Rollins and Sons, bankers. — E. H. Clapp is taking a business trip to South America where he will visit the West Coast, and return by the East Coast. We expect to have an interesting report of his trip.

Is it not possible that some real good '95 men would be interested in the dormitory problem at the Institute? Would it not be great if '95 could endow one?

Well, we have gained 2.3 per cent in our standing for payment of 1925–1926 dues to the Alumni Association. Come, get busy and get in line! Never too late!! Eight converts since last report.

The death of Frank C. Hatch, '95, during the latter part of November has been reported.

In the announcement of the death of Anthony D. Hall of Boston, formerly connected with the Adams House, we learn he was the father of William T. Hall, '95, Professor of Chemistry at the Institute.

We hear from our dear old mate, Arthur Canfield of Somerville, New Jersey, and New York City. Arthur got the boys together for their monthly luncheon at the Machinery Club, N. Y., on Wednesday, November 11. Those present were Swope, Huxley, Wolfe, Drake, Thomas, Moore, Gardiner, Wiggin, Claflin, and Canfield. Swope dispensed some words of wisdom while Johnny Moore delivered some pithy political advice. Let it be known that any '95 man, who is a stranger to New York, can have a luncheon arranged for himself, on short notice, by calling Arthur Canfield on the phone, 3357 Rector, at 25 Church St., New York. Remember this!

We hear from Ben Adams like a voice from the dead. On December 10, Ben completed his twenty-fifth anniversary with the American Blower Company, as district manager, located at Philadelphia, Pa. Ben lives in Germantown and wants all the boys to drop in on him any time. Ben's daughter is now a sophomore at Wellesley College. As Rear Commodore of the Island Height Yacht Club, Ben has a new name — Skipper Adams!

Mates, there are others to hear from; why not you? Drop me a line.

LUTHER K. YODER, *Secretary*,
Chandler Machine Company, Ayer, Mass.

'96

Items are rather scarce at this writing and the Secretary has decided to make this a travelogue report, because two of our classmates have made rather extensive trips.

Andy Maclachlan, after having traveled back and forth from Melrose to Boston for about forty years, decided that he wanted to try some other means of transportation than the Boston and Maine Railroad. Accordingly, he and Mrs. Maclachlan joined the party of Caledonians which sailed on the steamer *California* on July 26. Naturally Maclachlan gravitated towards Scotland. He picked up in Glasgow a wee bit of a car called the Morris Cowley and, with this, he and Mrs. Maclachlan journeyed over England and Scotland. His first visit was to his mother's old home at Strathaven where he found the house still standing. Contact was made with the original seat of the Maclachlan family and a very pleasant occasion was a tea given by the present laird of the clan, who appeared in full clan costume, thus setting an excellent example for Andy to follow when he gives a tea party in the future in Melrose. Later they visited Andrew's father's home at Tobermory, which has been made famous by Harry Lauder. Their journey took them through Edinburgh and London, where the car was left, temporarily, while he and Mrs. Maclachlan flew to Paris for a stop of four days, during which period Andy's eyes worked over time. On their return they started again in the car and journeyed up the other side of England, through the Bobbie Burns country. They came back to America on the *Transylvania*, it being the maiden trip of that boat. Altogether they were away for eight weeks and everything conspired to make it a most enjoyable trip. Even the ocean was smooth, both going and coming. Incidentally Mac visited the places where he had lived before coming to America and found some of the friends whom he had known in his boyhood days, forty years ago. Mac's health has been steadily improving. Having turned over the management of his store in Boston to his sons he now has nothing on his mind and is able to go away on trips like that of last summer without having to worry over the progress of business during his absence.

Jacobs has sent in a long report of his journey to date and he says that even this omits many of the important events of his motor pilgrimage. Leaving Vermont in July, with Mrs. Jacobs and their daughter, they motored across New York State, crossed into Canada at Niagara Falls, and continued to Sarnia where they put the automobile on the boat and sailed to Duluth. There he seized the opportunity to visit the iron mining districts of Minnesota and incidentally added to the car load by picking up iron ore specimens. Two days were spent in St. Paul visiting friends and then they set out on their long journey over plains and valleys and mountain ranges. The first stop was in the Black Hills of South Dakota to study geology and visit the gold mines. Their camping outfit proved most satisfactory and was used continuously between St. Paul and the Yellowstone. In the latter place it was too cold for camp life and heated cabins were obtainable at reasonable rates. They passed through the Bad Lands of South Dakota and the badder ones of Wyoming. Camping places varied from excellent to poor, and for a few days the heat was a bit trying. They found Deadwood, S. Dak., to be a fascinating place of lurid traditions and picturesque surroundings. They could not wait for an annual celebration of the days of '76 at Deadwood, but had to hurry on. They found Indian bands moving in from their reservations for the occasion and the natives were growing beards in order to represent the style of '76. They entered the Yellowstone via Cody and spent a week doing the regulation things and learning a lot about the geology, driving the car up over Mt. Washburn. Their next stop was Butte, Mont., where they camped out and nearly froze for two nights. Jacobs made good use of his time in going into the mines at Butte and visiting the milling and smelting plants at Anaconda. From Butte their route was northwest over poor Montana roads which were the worst in the entire course of their journey. They crossed the Bitter Roots in a hard day's travel of ninety miles and arrived in the Coeur d'Alene district of Idaho, a most picturesque country, where Jacobs took the opportunity to study lead mining and smelting. By this time it was August 26 and they had been obliged to pass by Glacier Park on account of lack of time and cold weather, so the next stop was Spokane, where there was an excellent camping ground. They drove to the Grand Coulee of the Columbia River, crossed the Cascades by the Bluette Pass over fine roads, which are so carefully laid out to grade that the car negotiates them on high gear. Seven days were spent in Seattle, living in one of the attractive kitchenette apartments that are available for transients. A side trip up to Vancouver was very interesting, but, unfortunately, the Canadians require that a visitor take out a $2.00 license before he can even buy a drink of beer at a rather fancy price. Jacobs balanced his thrift against his thirst and the former won. Heading south from Seattle they spent a week-end in Tacoma, made a cold and stormy side trip to Mount Rainier. However, they went out on the glacier and got some fine views. Some days were spent in Portland and a wonderful trip was had up around Mt. Hood and over the Columbia River Highway, which has perhaps the finest river scenery on the continent.

He tried to connect with Charlie Newhall at Medford but unfortunately Charlie was away from the ranch at that time. They arrived in Berkeley, Calif., on September 21 and stayed nearly a month, making a trip of several days to the Yosemite and a three-day side trip to Folsom, Grass Valley, Sacramento, and Calistoga, to see gold dredging, gold mining and milling, and fossil sequoia trees. Charlie

1896 Continued

Hyde arranged a lunch for them at the Faculty Club of the University of California. They had an apartment in Berkeley which was very satisfactory. They stopped in Palo Alto several days, looking over Stanford University and visiting friends. Next they visited Monterey for a week and had a real rest. Jacobs drove over to Carmel and looked up Professor Burton, whom he found in fine shape. A few days' stop was made at Santa Barbara and finally on November 1 they reached Los Angeles, where they took an apartment for six weeks. From Los Angeles they made side trips to Redlands to see Professor Lodge; attended a Technology dinner at which Burton was the guest; made a trip up in the Sierras to study the Southern California Edison power plant seventy-five miles east of Fresno. He was planning to look up Ashley and Batchellor and also made a trip to San Diego before finally sailing for Honolulu on December 19. There they will make their headquarters in a bungalow at Waikiki Beach and they are looking forward to a three months' stay, during which time they will make trips to the different islands, study the volcanoes, see scenery.

CHARLES E. LOCKE, *Secretary*,
Room 8–109, M. I. T., Cambridge, Mass.
JOHN A. ROCKWELL, *Assistant Secretary*,
24 Garden St., Cambridge, Mass.

'97

O. B. Smith has a son, Clifton B. Smith, at Technology in the Class of '29. — R. A. Swan has a son, R. A. Swan, Jr., at Technology in the Class of '29.

John Oliver Collins, '27, son of John A. Collins, Jr., has been elected Treasurer of the Combined Professional Societies at the Institute.

JOHN A. COLLINS, JR., *Secretary*,
20 Quincy St., Lawrence, Mass.
CHARLES W. BRADLEE, *Acting Secretary*,
53 State St., Boston, Mass.

'00

The editor's call for news has reached your scribe while he is hibernating at the Ravine House in the heart of the White Mountains. Just how he is going to dig up news and get it down to Cambridge in twenty-four hours is a problem, but here goes. As he writes, the thermometer outside the window reads twenty degrees below zero and a high wind is driving the snow in gusts down the valley. But five short days ago he sat in the Biltmore at Atlanta, Ga., and talked with Rawson Collier while the warm sun and mild air invited one to saunter up and down the terrace. The change in weather is decidedly noticeable. The Atlanta trip was necessitated by a hearing held in the Federal Court relative to certain alleged patent infringements in the construction of some southern hydraulic turbines. Our good friend Denison learned of our intended trip and promptly notified the South we were approaching. That was enough for southern hospitality and the trip was a huge success, at least socially. Rawson gave us a delightful time, entertaining us at his home and showing us the sights of Atlanta. Of course Collier is a real honest-to-goodness Southerner, having been brought up to believe that "dammed-Yankee" was all one word, but he early in life made all necessary corrections by marrying a charming girl from the North and rearing a family of three beautiful daughters who hold neither North nor South in preference. Surely a most delightful family. Collier is the southern representative of Dwight P. Robinson, Inc., and his work covers all the southeastern states. In a later issue we propose baring to the Class his interesting past.

A good letter comes from Frank Chase saying that he appreciates the 1900 news column and muttering something about an able pen. If he knew how the pen wobbles and hitches on this job he would hunt for a more truly descriptive word. He says he runs into Charlie Smith of St. Louis quite frequently and has spent many a pleasant evening at Smith's home. We understand perfectly how this is so, having met Mrs. Smith on the Cape Reunion, where she was one of the class attractions.

Just before our trip South a letter came from Al Merrill informing us of the loss of his mother and we did not have to read between the lines to see that her death had been a hard blow to him. They had been close pals all these years, Merrill having never married. Our sincere sympathy is his at this time and we hope some of the fellows who were close to him in the old days will write to him at 10 Kearny St., Newark, N. J.

GEORGE E. RUSSELL, *Secretary*,
Room 1–272, M. I. T., Cambridge, Mass.

'01

There seems to be a fatality about these holidays. My last class notes were compiled on Thanksgiving Day, while these are being collated at the joyous season when, theoretically at least, "Peace on Earth and Good Will to Man" is supposed to reign. In other words, on Christmas Day. Much has happened since last we went to press. A circular letter has gone out placing modestly before the Class the advantages to be derived from a Twenty-Fifth Reunion and urging that each member begin to save up his pennies and participate in the event. The replies so far received have been most gratifying, and the modestly proposed guarantee of twenty-five participators already exceeded. Another personal letter will be sent out before long so that it is only necessary here to say that the Reunion is assured.

Roger Wight sends in from Hartford that he will insure it, but as Roger's hobby now is fire insurance, I fear that an immediate point of contact is lacking. Roger's company is the Travelers of Hartford, Conn., and I call attention to this fact to those members of the Class who must journey from afar during the coming June.

Farnum Dorsey writes in from Rochester, N. Y., that he is doing engineering work and acting as attorney for the North East Electric Company. He adds that he is a testifying expert in patent suits. While I am not familiar with the procedure in the New York courts, I feel certain that this is a type of litigation rather than a form of haberdashery dictated by considerations of safety. I pause for a moment to review mentally a damage suit many years ago in which I was retained as an expert. My opponent was a distinguished ex-U. S. A. engineer who testified that the only way that a boiler could be graded was by the area of the grate. Well coached by Eddie Miller, that ever-helpful friend of all Technology men, I raised a modest question as to the influence of draft upon the performance of these useful and necessary adjuncts of civilization. In testing these boilers the preceding week we had started a serious forest fire by blowing large lumps of blazing coal over the countryside, wafted gently by the adventitious aid of forced draft. I think some of the jury were in the local fire department: anyhow we won the suit. But with the garrulity of age I wander far afield from Farnum. He hopes to be present at the Reunion although his court affiliations introduce an element of uncertainty. Let us trust he will appear, and, if it is not too much to hope, that he will be wearing one.

Heber Haynes, whose address is P. O. Box 97 in the rural village of Lawrence, Mass., sends a challenge in the following form: *Tempus fugit. Periunt et imputantur.* With smug complacency I acknowledge that I was well trained in the humanities—and also own an anthology. Further, I do not agree with Heber's philosophy. For the benefit of the Class illiterati I enclose his message. Heber plans to attend the Reunion — although up to date he has remained non-commital — in order to discuss the ethics of the question with that protean member of the Class, George Anthony Hall, who has recently turned to finance as a worthy sphere for his activities. When George was invited to become a member of the class Committee on the Reunion he acidly declined on the ground that he would find but little companionship in those likely to be present. Should this reach his eye, as I trust it will, he may find that he has misjudged at least one member of the Class, and there are others, George, there are others.

Bill Sweetser, still in Orono, Me., is coming to the Reunion. More than that, William, who inverts in his name the modest title of one of the sweetest of our indigenous blooms, says that he had a good time at the Twenty-Fourth Reunion. Bill and your Secretary were the guests of the Strawberry King during the perilous journey thither, and in Bill's case also yon. I like a chap to come out flatfootedly and say he has had a good time, when he has. I know that he did much to gladden the drab hours spent by the Strawberry King away from his spreading acres where that most luscious of fruits is seemingly ever ripening in the sun.

Ralph Stearns, now a citizen of the world metropolis in which the Technology center — not the center of Technology — is soon to be erected, is in the hydraulic department of Sanderson and Porter and is designing 70,000 H. P. hydro-electric plants as well as investigating and appraising projects and properties in this field. Ralph had so good a time at the Twenty-Fourth Reunion that he returned with his wife to Osterville later in the summer for his vacation. He pays a tribute in passing to the charm and goodfellowship of our Philip of the private road, a sentiment in which every man in the Class will heartily agree.

George Hyde writes in from Montreal where he is junior partner in the firm of Nobbs and Hyde, architects, that he was greatly disappointed to miss the Twenty-Fourth Reunion but does not intend to fail the Twenty-Fifth. More recently he has written that Harry

1901 Continued

Maxson is a fellow resident of that beautiful center of pre-Volsteadian activity, and that Harry has now become a golf player. The Forest and Stream Country Club, a few miles outside the city, is one of the most attractive places that I have ever visited, and I can quite understand Harry's devotion to the grand old Scotch game. For his information I will say that there are a few members of the Class on this side of the border who wield a mean club and I can guarantee him stimulating competition in any field of endeavor which he may select.

Harry Gilson is with the United States Rubber Company and is a resident of that charming suburb, New Rochelle. Harry is technical assistant to the President and Chairman of the Board and is also general engineer in charge of all engineering matters, including development, for the twenty-four factories of the company. Harry has five children and two grandchildren. He offers this as a record for the Class of '01, and I call for news from any other member of the Class who can equal or surpass this tale of public service. Harry is coming on for the Reunion, but for various reasons will leave the reserve and the landwehr at home. He has been very active in church affairs in his home town though I hasten to add, lest misconception arise, that his interests have been chiefly financial. His latest achievement has been to make possible the erection of a Community House. In view of the grandchildren, however, I see a possible touch of hedonism in this last activity. Which reminds me, a parent some years ago, blessed with a numerous progeny, in due course of time and nature was promoted to grandparental status. As each little stranger joined the ever widening family circle in blessings, goodwill, and more tangible evidences as mugs, gold pieces and the like, he was a model relative. With the passage of years, however, his youngest boy took unto himself a bride and with the lapse of time yet one more little flower came to enrich the family garden (I hope Ted Davis will respond to this felicity of expression). With the advent of the newcomer, however, grandfather's attitude completely changed and he refused sourly to see the little one. Grieved and injured the young parents at last sought his reason for this foreign and unfriendly behavior. Forced to reply he spoke as follows: "Children, it isn't that I don't like your baby but I am dammed sick of saying, 'Kitty, Kitty.'"

There is an unusually large crop of changed addresses, namely, four. The first as it comes to me is Mr. Harold P. Parrock, 64 Francis St., Brookline, Mass. When and where Perk acquired that Harold, I can not say. Presumably it has hidden coyly behind the reticent "H" which we have always associated with his patronymic. Austin Hyde is now at 51 Randolph Ave., Milton. Greta Gray, who has been doing graduate work at Yale, as earlier noted in these columns, is in the Home Economics Department of the University at Lincoln, Neb. Little Eddie Fleming has joined the Latter Day Saints and is with the American Smelting and Refining Company in Salt Lake City.

ALLAN WINTER ROWE, *Secretary*,
4 Newbury St., Boston, Mass.
V. F. HOLMES, *Assistant Secretary*,
131 State St., Boston, Mass.

'02

James J. Mahar has been appointed by the School Committee of the City of Boston to a newly created position, his official title being Domestic Engineer. His duties will be to secure the greatest efficiency and economy in the matters of heating and lighting the Boston school buildings. Mahar's long connection with the schoolhouse department, for which he was for many years engineer in charge of heating and ventilating layouts for the new schoolhouses, has eminently fitted him for this position. For a number of years Mahar served as a member of the Schoolhouse Commission, and an account of his disagreement with the Mayor, which led to his summary dismissal, was published in an earlier issue of The Review. No one whom we have met thinks any the less of Mahar, and his new appointment meets with unanimous approval.

Kellogg has moved his residence to New York, his address being 49 E. 92nd St. — Steve Gardner is living at 7 Prospect St., New London, Conn., as he is now at the Groton (Conn.) plant of the Electric Boat Company. — William N. Brown's address is 515 W. 110th St., New York City.

The impending Technology gatherings in Boston and New York will doubtless bring out much class news so that the notes in the next Review should be more extensive than these or the ones for last month.

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BURTON G. PHILBRICK, *Assistant Secretary*,
276 Stuart St., Boston, Mass.

'03

The regular bimonthly class dinner was held in Boston, December 18, at the Copley Square Hotel with the following men attending: Nutter, Stiles, Aldrich, Haddock, Howard, Gleason, Scholtes, Jackson and Jewett. The occasion was graced by two roast wild geese shot by Gleason and donated by him for the gastronomic edification of the assembled company. They (the geese) were of excellent quality and done to a turn, and with the balance of the menu made a most excellent dinner. Your Secretary's appeal for class news two months ago does not seem to have produced any tangible results. Probably with the array of notes issued at that time, which had been accumulating all summer, it may have appeared that the supply was inexhaustible, but the present offering will surely dissipate any such illusion. The appeal is therefore repeated. I wonder if many of the wives of '03 men read the class news? If so, they are in a position to put some dynamite under their better halves. It has been done.

CHESTER S. ALDRICH, *Secretary*,
10 Beaufort Road, Jamaica Plain, Mass.
GILBERT H. GLEASON, *Assistant Secretary*,
25 Huntington Avenue, Boston, Mass.

'05

Gilbert Tower reports: "I have been in fire insurance work for the last two years with a New York company, traveling in New York State and New England but living at Cohasset, Mass. Last May, an offer came along from an insurance office in Chicago and, as I had for some time felt that the opportunities were better in the Middle West, I accepted. Since July, I have been with the James S. Kemper Company which has a large and rapidly growing organization for providing complete insurance service under the mutual plan. I brought my wife and four children out here in September and we are now settled in Evanston, a pleasant residential suburb. We like it here very much. Chicago is a very progressive city (guess yes with Jones, Ed.) and I think there is every opportunity here." We think so, too, and wish Gib success. He adds: "It was a great disappointment to us not to get to Marion last

1905 Continued

June. We had been looking forward to it for two years and were on our way when the auto broke down."

H. R. Robbins has returned to the United States after an absence of over three years in Australasia, British India and the Far East in the interests of the American Cyanamid Company. Some time ago Robbins was so upset by the adoption of the cap and gown by the graduating class that he resigned from the Class and Alumni Association in protest. He was then in some hot country. Now we shall have a chance to convince him that we are no more in favor of the academic costume than in 1905 and that our only official uniform is the white gob's hat.

We were pleased to learn that Fletcher Burke was Secretary of the Technology Club of Buffalo.

According to Ralph Segar, one of the important exhibits at the recent Power and Mechanical Engineering Show in New York was that of the Crane Packing Company of Chicago, Frank Payne, President. Ralph says: "I dropped in one night to see Frank but he had gone to the Follies and left the booth in charge of some young Technology men. Incidentally, I hear that Frank has been packing his organization with Technology men for some time, beginning with Al Smith who runs the factory, and is now taking life very easy, just watching the profits. It's a graft. He buys some regular packing, Smith wraps it in tinfoil, like cream cheese, and the young Technology men sell it at a fabulous price. Has everybody thinking it's the real stuff. I am getting up something like it to fool the electrical trade. Raymond Ware's Morse Chain Company was also at the show and I couldn't find him, either, but I don't believe he would go to the Follies. We are not so sure but, anyway, Ray says he is a '07 man and we cannot be responsible for him."

Speaking of '07, Roy Gale is another '05 man who, by some misfortune, graduated with the later Class and sees fit to associate with them. He was in Middletown one week-end and your Secretary had a pleasant talk with him. He was quite apologetic about his shift. He is chief engineer of the Midvale Steel Company in Philadelphia.

Columbia University is putting on a course on Building Management under the auspices of the Building Managers and Owners Association of New York. There will be fifteen lectures by the great realtors of the city, viz., Bert Files, who will hold forth on March 31 on "Maintenance and Operation of Loft and Office Buildings," a subject upon which he speaks with authority.

We are pleased to add to our class bibliography "Materials Testing: Theory and Practice" of which Irving Cowdrey is one-half author. Of the articles in learned journals, Henry Keith contributed a paper on "Ships Lines" in *Marine Engineering*. And of course we cannot neglect Doc Lewis who is at least partly responsible for "Influence of Reaction Rate on Operating Conditions in Contact Sulphuric Acid Manufacture," which must be intensely interesting to a student of naval architecture.

ROSWELL DAVIS, *Secretary*,
Wesleyan University, Middletown, Conn.
S. T. STRICKLAND, *Assistant Secretary*,
20 Newbury Street, Boston, Mass.

'07

We understand that Bob Albro has left Fred T. Ley and Company, of Springfield, Mass., with whom he was long associated. He is now in the wooden toy business. — Frederick Bachman is now located at 165 Broadway, New York City. He is a patent lawyer. — Bert Bancroft, very successful show manufacturer, bought one of the finest houses in Newton, located at 45 Sylvan Ave., West Newton. The house is of handsome English architecture, surrounded with trees; the lot contains 26,000 square feet. — Edwin W. Bonta now has his architect's office at 601 Snow Building, Syracuse, N. Y.

The following item regarding J. S. Coupal appeared in the *Arizona Mining Journal* of October 15: "J. S. Coupal, mining engineer of Boston, Mass., who is associated with Kirby Thomas of New York City as consulting engineers for the Hassayampa Gold Placer Company, Phoenix, Ariz., has been spending several weeks in Phoenix in consultation with the company officials relative to further development of their work."

John Frank writes that he has a daughter, Susan, born November 11. He says, "Might look as though we are collecting girls, as this is our third daughter."

Our Class President, Alexander Macomber, has recently been appointed assistant professor in the Graduate School of Business Administration at Harvard University, to give courses in Public Utilities. This is entirely an additional activity to his growing professional and business interests. Mac's office is now at 35 Congress St., Boston, Mass. — Sidney Wells is now with the Paper Mill Laboratories, Inc., Quincy, Illinois.

On November 1, James Reed was appointed as works manager in charge of plant operations of The Celite Company at Lompoc and White Hills, Calif. Graduating from the United States Naval Academy in 1902, Reed took a post-graduate course at the Institute. Commencing in 1902 he was for eighteen years connected with the United States Navy Department in the Bureau of Construction and Repairs in various assignments, specializing in shop management and labor problems at the Philadelphia, Puget Sound and Mare Island Navy Yards. During two years of the time his services were "loaned" by the Navy to the City of Philadelphia in connection with the reorganization of municipal departments. During the World War he was on duty at the Mare Island Navy Yard in charge of the construction of destroyers and the battleship *California*. Reed resigned as commander in the Construction Corps in 1920 to become assistant to the President of the Los Angeles Ship Building Company. Since 1922 he has engaged in private practice as a consulting and supervising engineer.

The New Orleans *States* of November 9 contains this item regarding J. H. Walsh of our Class: "Commander John H. Walsh, general manager of the New Orleans Dock Board, was appointed a member of

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the United States Shipping Board by President Coolidge, late Monday, to succeed Frederick Thompson, resigned.

"In this selection, New Orleans has won recognition for which this port has battled for years. As the leading Gulf port, it has been the contention that this city should have a place on the shipping board from the Gulf district. Commander Walsh was formerly an officer in the United States Navy. He knows shipping in all its details. . . . His appointment, it is believed, will mean much not only to New Orleans but to other Gulf ports. He knows all their needs.

"Mr. Walsh is in Washington and conferred with President Coolidge shortly before his appointment was announced. He was recommended for the post by Senators Ransdell and Broussard of Louisiana.

"John Henry Walsh was born in Marquette county, Wisconsin, December 5, 1879. He graduated from the United States Naval Academy and took his degree in naval architecture from Massachusetts Institute of Technology, in 1907. He married Miss Jessie McBridge, of Columbia, Pa., August 25, 1906.

"He entered active service in the United States Navy as ensign in 1903. He was promoted to lieutenant junior grade in 1904; lieutenant in 1908; lieutenant commander in 1916; and commander in 1917. He retired from the naval service in October, 1920, and became an expert naval architect. He practised during 1920 and 1921 and then was selected general manager of the New Orleans Dock Board. He is a member of the Society of Naval Architects and Marine Engineers, and the Engineering Society, New York Yacht Club and the Army and Navy Club.

"As an author, Commander Walsh achieved wide recognition over several books, notably 'Cam Clarke,' appearing in 1916, and 'Glenwood of Shipbay,' appearing in 1921."

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2 Rowe St., Auburndale, Mass.
HAROLD S. WONSON, *Assistant Secretary*,
W. H. McElwain Co., Manchester, N. H.

'09

To the Secretary of the Technology Club of New Bedford, we are indebted for a most interesting clipping from the *New Bedford Sunday Standard* describing the work of the Acushnet Process Company founded by Philip E. (Cy) Young in 1910: "Starting with an original plant of about 300 square feet of floor space, it has now grown to occupy about 100,000 square feet of floor space, giving employment to about 125 people. In making the millions of tires which are turned out annually by the various tire manufacturing companies, there are quantities of scraps and trimmings from the rubberized fabric. A large amount of rubber compound, since it has not been vulcanized, is suitable to use again in tire fabric if it can be recovered without the use of vulcanizing temperatures. To accomplish this recovering of rubber, the tire companies ship the scraps back to New Bedford to the plant of the Acushnet Process Company, which through the use of special equipment, is able to recover the rubber compound by destroying the cotton fabric which the scraps contain. This recovered rubber is shipped back again to the tire companies. The common belief that this plant reclaims rubber from old tires and various other discarded rubber goods is entirely untrue since only unvulcanized rubber, the raw material containing the various compounds but not subjected to heat which combines them chemically, goes through the reclaiming process.

"In addition to the reclaiming of rubber, an interesting division of the plant is the sundries department. Here are produced toy boats, bathing caps, hot water bottles and various other novelty rubber products. The manufacture of these sundry articles is of comparatively recent origin, but this department has grown rapidly, and is now an important part of the business. The steady and consistent growth of the Company is a reflection of the untiring energy and ability of its founder and his associates."

John Mills has been appointed director of publication of Bell Telephone Laboratories, Incorporated, New York City. Mills was formerly personnel director of the engineering department of the Western Electric Company, which operated the research and development laboratories of the American Telephone and Telegraph Company and the Western Electric Company prior to January 1, 1925. At the annual convention of the American Management Association, Mills read a paper on "Selecting and Placing College Graduates in Business."

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GEORGE A. HAYNES, *Assistant Secretary*,
186 Lincoln St., Boston, Mass.

'10

Again the time for Review notes comes around, and as usual material is scarce, although not absolute zero as it was a month ago. A belated clipping sent along from the Review office announces that Miss Winifred, daughter of Mrs. Edwin Carrington, was married to Walter Talbot Spalding, in Brooklyn, on October 21. — We also learn that Spencer B. Lane, I, has a son, Norman H. Lane, in Technology in the Class of '29. It used to be a good joke to talk about sending our sons to Technology; it seemed infinitely far off, but here we are.

Herb Reynolds has just sent in his present address. He is with E. P. Ross and Company, Realtors, Daytona Beach, Fla. Evidently we'll soon have a multimillionaire in our ranks.

Carl Lovejoy kicks in with a good letter: "Your plea for five-year letters should bring answers from out-of-town Tenners, but how about those residing in Boston? They do not think of writing a letter for the class notes. Wish you would exercise some of your literary ability in writing up a story of their activities. You might even tell us of the Deecy Products Company.

"After nine years with the Pittsburgh Testing Laboratory I left them this fall to start in the same business for myself along with several other men in Cleveland. We have a good chemical and physical testing laboratory and test materials and inspect construction work, acting as the intermediary between buyer and seller to see that the buyer gets his money's worth. Besides doing work for most of the local municipalities we have considerable building work and routine chemical analysis.

"I was sorry that I could not be in Boston for the Reunion last summer. I have not been home for some years and have never seen the new Technology buildings. I believe that my wandering is over and that I am settled in Cleveland for a long stay. Hope you will find time to work up some news of the men in Boston."

One of these days I'll take your advice, Carl, and write up a drool

1910 Continued

on Deecy Products and How I Made Two Barrels of Oil Grow Where One Grew Before. Meanwhile, I hope many others will follow your example.

DUDLEY CLAPP, *Secretary*,
15 Draper Ave., Arlington, Mass.
R. O. FERNANDEZ, *Assistant Secretary*,
264 West Emerson St., Melrose, Mass.

'11

It's a pretty safe bet that you were all delighted to read at the close of the 1911 notes in the January issue that we had secured the facilities of the Riversea Club, Saybrook, Conn., for our Fifteen-Year Reunion, May 28–31, 1926. This Club is the "seashore branch of the Lake Placid Club in the Adirondacks" and is highly recommended by several Technology classes who have recently held reunions there. First publicity will have been sent to all members of the Class ere these notes appear in print.

Dippy Allen, II, comes to bat with a fine newsy letter written in mid-December. He has been transferred from Des Moines, Iowa, to the main office of The Philadelphia Company, where he is now assistant to the general superintendent. He and his family are residing in Ardmore, a Phillie suburb. He has been, you know, superintendent of the Des Moines Gas Company, a subsidiary of the parent organization.

The Affiliated Technical Societies held a two-day fuel and power meeting in our old favorite, Huntington Hall in the Rogers Building, December 10 and 11, and one of the featured speakers was Fred Daniels, VI, Vice-President and General Manager of the Sanford-Riley Stoker Company of Worcester. Certain of his remarks appeared on page 140 of the January Review.

Jim Greenan, III, has resigned as superintendent of the Pittsburgh and Mt. Shasta Gold Mining and Milling Company, Randsburg, Calif., and has affiliated himself with the Pacific Smelting and Metals Corporation at Lovelock, Nev. — Frank Osborn, another miner, after a short trip to the States has returned to South America, being located now at Potrerillos, Chile, with the Andes Mining Company.

Professor Locke of the Mining Department supplies the news that Tom Killion, III, is now back in the United States and living for the present at the Technology Club of New York. His present plans are somewhat indefinite, but he hardly expects to return to China.

Our sympathy certainly goes out to A. T. Cushing, I, in the death of his father, Richmond Hersey Cushing, '75, on December 7, at his home in St. John, N. B. Cush came on from Kansas City when his father was stricken, but arrived too late to see him again alive.

At the regional meeting of the American Society of Steel Treating in Cleveland on December 18 the principal speaker was our old friend Aurora Borealis Grossman, research metallurgist of the United Alloy Steel Corporation, Canton, Ohio. His subject was "General Precaution to the Manufacturer of Alloy Steel."

Here endeth the first lesson. The second lesson is written in the future tense, scene: Riversea Club, Saybrook, Conn.; time: May 28–31, 1925; and reads: "You must come over!"

ORVILLE B. DENISON, *Secretary*,
Room 3–207, M. I. T., Cambridge, Mass.
JOHN A. HERLIHY, *Assistant Secretary*,
588 Riverside Ave., Medford, Mass.

'12

We are very much pleased to announce the arrival of Robert Allen Ferry at Pittsfield, Mass. Earl has him entered for the Class of 1948. — Harold D. Mitchell is now with Sumet Corporation, 1543 Fillmore Ave., Buffalo, N. Y. — M. F. Groupner is now located at 938 Georgia St., Los Angeles, Calif. Groupner is actively engaged in mining at the present time. — V. V. Ballard writes from Chicago that he has left the Yellow Cab Manufacturing Company and gone back to railroading, this time with Chicago, Milwaukee and St. Paul in the office of Auditor of Investment and Joint Facility Accounts.

Nineteen-twelvers holding office in the various Technology Clubs this year include Johnny Noyes, President of the Duluth Club; Page Golson, President of the Kansas City Club; W. S. Wolfe, President of the Akron Club; and H. H. Hanson, Secretary of the Bangor Club.

Heine Partridge is still in Cleveland with the Firestone Rubber Company. He is now branch engineer, having charge of branch real estate, buildings, and equipment. As they have branches in approximately sixty cities, Heine covers a deal of territory.

1912 Continued

The New York contingent of the Class has been strengthened by the addition of Leonard M. Sandston, I, to its regular monthly luncheon club. He reports that after the war (when he served with the Anzacs) he was mustered out in Australia and remained there for several years. Then he came back to the United States and has been until recently in Middletown, Ohio, as a special engineer and consultant for the Armco Companies. Now he is going to locate permanently in the metropolis. He promised to write us a letter relating a little more specifically his history and future plans, but it hadn't arrived up to time of going to press. So if this account is not 100 per cent, Sandy, you have only yourself to blame.

The December 10 luncheon brought out Rhodes, Yereance, Sandston, Priest, Ralph Ferry and McGrath. The slim attendance was due to the fact that a number of the regulars were tied up at a luncheon meeting of the A. T. and T. Company. It was reported to your Secretary that this competing luncheon attraction was a free one.

Harold W. Danser, VI, reports that he is wintering at Miami and Palm Beach, but neglected to state whether he is selling water-front lots or merely playing golf and fishing for tarpon rather than suckers. His address is Hotel Halcyon, Miami, Florida.

Discussion of the proposed Fifteen-Year Reunion in 1927 brought out a general feeling that it ought to be held somewhere accessible to New York. It is believed, by the proponents of this idea, that not only is this consideration due the large New York group, but it would be easier for those located in the South and West to attend.

Let's have some more suggestions. It's not too early to begin working up a little enthusiasm.

FREDERICK J. SHEPARD, Jr., *Secretary*,
125 Walnut St., Watertown, Mass.
D. J. MCGRATH, *Assistant Secretary*,
10th Ave., and 36th St., New York, N. Y.

'13

Allison P. Smith reports the safe arrival on November 15 of Donald Bishop Smith. The latter is the fifth child, all boys, to grace the Smith home. The only other reported father of five is Bill Brewster. Are there any other 1913 men so fortunate?

Smith also reports that the official class goat, Skeezicks, is fat as a pig and will be ready for carving at the Thirteenth Reunion in June.

Russell E. Leonard was married on November 16 to Miss Dorothy May Conner of Rockville Center, L. I, N. Y. To them we extend the best of wishes for much happiness. They will reside in Rockville Center, at the corner of Hendrickson and Patten Avenues.

Pa Ready, President of the National Company, is the man responsible for the upbuilding of a radio manufacturing business that has spread from coast to coast in a little more than a year. Contact in laboratory work with Messrs. Browning and Drake of the Harvard Engineering School brought about an association which resulted in the development and manufacture of the national transformer for the popular circuits and hookups. Working with these young scientists, Ready is devoting his resources, energy and ability to the further development and simplification of radio.

HARRY D. PECK, *Secretary*,
99 State St., Boston, Mass.

'14

The notes this month might well be marked "Special Aviation Edition." The first item of interest appeared in the newspapers Monday, November 30. It described a scene at the Boston Air Port on the preceding day. . . . A battery of newspaper photographers, with their graflexes at alert, awaited the arrival of a plane from the South. The wait was not long because very soon a huge monoplane appeared. As it approached the air port it was evident that it was of the enclosed passenger type. It glided gracefully to the ground, taxied around to air port headquarters, a door opened and out stepped our own Porter Adams and Mrs. Adams, followed by Mr. C. G. Peterson of the Wright Aëronautical Corporation and several other passengers. The flight was made from New York in one hour and thirty-four minutes. An aftermath of this flight appeared in the rotogravure section of the *New York Times* the following week. It showed a picture of Porter and Mrs. Adams and was entitled "The modern substitute for the stirrup cup — Lieutenant-Commander Porter Adams, President of the Massachusetts Aëronautical Society and Mrs. Adams, drinking coffee after their arrival in Boston from Mitchell field in a new Wright-Bellanca airplane." The Class became very hilarious over this caption, particularly the word "coffee."

The following Tuesday was our regular monthly luncheon. At this luncheon Porter Adams arranged to have Mr. Peterson and Jack Harding, who was pilot of the plane *New Orleans* on the world flight, present. Adams gave a very interesting talk on aëronautical affairs in Washington, particularly regarding the Mitchell trial at which he was a witness. Mr. Peterson told about the excellent work that our own Dinney Chatfield was doing at the Wright Aëronautical Corporation. We swelled with considerable pride when we learned of the new plane that Dinney has designed for the Navy, which plane has been passed upon as one of the greatest planes the Navy has ever had. Unfortunately, Mr. Harding could not be present at the first part of the luncheon and part of our number who were obliged to leave early missed him. He told many of the humorous experiences they had on the world flight. The luncheon was truly a great affair. Besides being a testimonial luncheon to Messrs. Peterson and Harding it was a Christmas celebration. Although the luncheon started at 12:30 it did not end until six o'clock. Those present besides our guests were Morrison, Fales, Wylde, Downing, Crocker, H. S. Wilkins, Ricker, Adams. Sherman, Vanetti, Ahern, McClellan, and Richmond.

As if all of this aëronautical publicity were not enough for Adams, the Boston *Traveler* came out with an editorial on him. This editorial urged Mayor-elect Nichols of Boston to reappoint Pat as Chairman of the Boston Air Port Committee. It gave Pat great credit for the work he has done for aëronautics. Several of us became so enthusiastic over Adams' and Peterson's description of the Wright-Bellanca plane that we wanted to try it out, and through the very generous kindness of Mr. Peterson a demonstration flight was arranged. Ricker, Wylde, Crocker, H. S. Wilkins and your Secretary went over to the Boston Air Port and enjoyed a very pleasant and interesting trip around greater Boston at an elevation of about 3,000 feet.

During the past month word has also come from California telling of the wonderful design of a new plane that Donald Douglas of our Class has accomplished. These planes will be used in the Army Air Service. You will recall that Doug was the designer of the world flight planes.

It is with great pleasure that we announce the arrival of Dean A. Fales, Jr., born October 10. Dean already has him booked for Technology. He refuses to make any commitments as to what Class he will be in, but if he follows his father's great example he will be in the classes of '45 and '55 inclusive. Not to be outdone by Dean, Boggs Morrison wished to have announced to the Class that he also is the

1914 Continued

proud father of a second son. Further investigation, however, proved that the date of arrival was May 11, 1923. Those attending the luncheon were not quite sure whether Boggs was sincere in his accusation of the Class Secretary that he had not given due publicity to this great event, or whether Boggs was just mixed up on his dates. A search of the birth records proved that Boggs was correct.

H. B. RICHMOND, *Secretary*,
100 Gray Street, Arlington, Mass.
G. K. PERLEY, *Assistant Secretary*,
45 Hill Side Terrace, Belmont, Mass.

'15

Ed Fonseca, VI, who had dropped out of sight, as far as the Class was concerned, came to see me some time ago. Ed is with the Wilcolator Company in Newark, N. J., and is, I believe, their chief engineer. The Wilcolator Company manufactures heat regulating devices. Ed has been married seven years and is the father of a five-year-old boy.

Jimmy Franks, who has been with White Company in Cleveland, is now in Philadelphia with that concern. — Henry Daley wrote me from Camden, N. J., in reference to Les Morse's death. He is with the B. F. Sturtevant Company in Camden.

The following item should be particularly interesting to '15 men: "M. F. Coolbaugh, Golden, Colo. It might be interesting to know that Coolbaugh, who, however, was only affiliated with Technology some years ago for a very brief period of research work, and who is the inventor of the Coolbaugh Process for sulphating, was elected President of the Colorado State School of Mines and assumed his duties there September 1. He was formerly manager of the Research Department of the Metals Exploration Company, and Vice-President of the Complex Metals Company."

Azel Mack is always on the job. He is now in Pittsburgh and wrote from there: "After our own Reunion, and it certainly was a wow, I saw Alden Waite and even with his enthusiastic description of the 1914 Ten-Year Reunion last summer, he had to admit that it didn't compare with ours. Everybody I have seen says it was a splendid success, and it surely did a lot to weld together any drifting members of our Class. With this as an example, we surely ought to plan for a Fifteen-Year meeting also.

"On my way to our branch office here I met Charlie Hall in Syracuse, and in Buffalo I saw Ben Lapp who was interested to hear all about the Reunion and regretted that he couldn't arrange his vacation dates to go. In Lockport, N. Y., I saw Jimmie Neal, who is a very prominent and influential citizen up there. I spent an interesting hour viewing the broadcasting station at his plant. Unfortunately Willie Wilson, who played such a star game of ball for us, was not in Lockport.

"Due to my visit up there, I missed the regular Technology luncheon of the Buffalo Technology Club at the Statler. In Corning, N. Y., I met Sandford Willis at the Corning Glass Works. It was a pleasant visit and the trip through the plant, with his explanations of their different products, showed me a lot about glass making that we never learned in that industrial chemical course we took. Through his acquaintance, Willis kindly paved the way for us to do some business with his company.

"I have just found out that the Technology Club here meets regularly at either the Chamber of Commerce Building or one of the hotels, and I hope to go down to meet some of the men. All of the fellows whom I have seen send back their best regards, and several have remarked that it is a good thing there were no big league scouts around to watch George Rooney perform in that ball game, otherwise you would lose a trusted and what they laughingly refer to as a valued business associate."

FRANK P. SCULLY, *Secretary*,
118 First St., East Cambridge, Mass.
HOWARD C. THOMAS, *Assistant Secretary*,
100 Floral St., Newton Highlands, Mass.

'16

No notes have been received by The Review Editors from the Secretaries of this Class for inclusion in the February issue. The Secretary received the usual notification that copy was due, accompanied by such news as had been compiled in The Review Office. Members of the Class having news or inquiries should address them to D. N. Barker, Secretary, 14 Marathon Street, Arlington, Mass., or to Charles W. Loomis, Assistant Secretary, 7338 Woodward Avenue, Detroit, Mich.

'17

President Hayden of the Alumni Association stated that the most important thing to be done for the Institute at present is the construction of additional dormitories. He has asked what the classes will do to help, and while the way for 1917 does not seem clear at present, possibly some member or members of the Class will have constructive suggestions.

In a letter dated November 22, from 1680 South Clarkson St., Denver, Colo., Peso Moody writes that he is still in the contracting game, and is gradually building up quite a little business. He contracts water, gas and oil pipe lines, or the ditching for them. He likes the work very much, and believes prospects are good. He wishes to be remembered to all of his old friends.

James William Doon, bicycle rim magnate of Henniker, N. H., made his last visit to the outer world before hibernating until Spring, and paid his respects to the Institute. His visit came at the time of the winter solstice and made the day seem unusually bright and interesting.

RAYMOND S. STEVENS, *Secretary*,
30 Charles River Road, Cambridge, Mass.

'18

No notes have been received by The Review Editors from the Secretary of this Class for inclusion in the February issue. The Secretary received the usual notification that copy was due, accompanied by such news as had been compiled in The Review Office. Members of the Class having news or inquiries should address them to Percy W. Carr, Secretary, at 400 Charles River Rd., Cambridge, Mass.

'19

November and December slipped by on the calendar without any signs of life from '19, and if you missed our genial presence on the pages of The Review, I hope you will join me in a New Year's resolution to look alive and make a name for ourselves individually and as a Class. How about it? The Boston crowd did not succeed in getting together in the fall, but we hope to after the Annual Dinner on January 9. Don Way writes that he hopes for a similar gathering in New York, and I'm sure his presence in Boston will be a signal for a rally so we hope he will get up here some time early in 1926.

Class dues for this year have been fixed by the committee at two dollars, and bills will be sent out after the first of the year. Cards for recent data for class files will accompany the bills and deserve your careful and prompt attention. So much for business!

For personal news, we hear that S. A. Kaufman has opened a surveying office at 423 High St., Malden. Best o' luck to him! — A. B. Staubach writes from Glen Ridge, N. J., that he has been on the shelf for the past year physically and would be glad to hear from any of the fellows in the Class. His address is 260 Ridgewood Ave. I am sure that I voice the wishes of all of you in saying that we hope he will be quite fit again soon.

The following letter comes from Ev Doten, care of Stedman Products Company, Detroit: "I have followed with interest our columns in The Review and even though I have determined many a time to write you, there always seems to be some reason, although not an excuse, for not doing so. This is without doubt the same experience with which so many of the rest of the Class are afflicted. Although we have been in Detroit a little under six months, somehow it seems a great deal longer, as business has kept us on the run constantly, so time has not hung heavily on our hands. I do, however, miss the class gatherings which are possible around Boston, but, of course, not here. The local Technology Association has a very good membership and has very enjoyable meetings at least once a month, although to date, I have seen no members of our own Class. Do your records show that Sam Heyman is still located in Detroit? He was here a few years ago but I have since lost track of him. Please give my best to any of the boys and if your revised records show any Nineteeners in this section of the country, I shall be very glad to know about them." Such letters make the job of Class Secretary seem worth while. It really takes only a few moments, why not try it?

Announcement has been received of the marriage of L. E. Beaulier to Mlle. Maria Rose Antonia on November 25, in Holyoke, Mass.

Oscar Mayer sailed from New York last May with his wife to explore in South America. From Antofagasta he reported that most of the members of the Class from Chile were either married or expected to be very shortly. He is now back in New York and was scheduled to give a lecture on his experiences at the Technology Club recently. In the absence of direct news from him, we publish this extract from a recent Boston paper: "Miss Natalie Rogers, in private life Mrs.

1919 Continued

Oscar de Lima Mayer, holds the distinction of being the first white woman to penetrate to one of the least known, sparsely inhabited regions of the Amazonian basin, South America, and of popularizing bobbed hair among the natives. It was a story of crossing the frigid Nevado de Sorato mountains in Bolivia, of riding the dangerous rapids of the Mapiri river, of subsisting on monkey meat and tropical fruits when their supplies became exhausted, of narrow escapes from man-eating crocodiles and of the ravages of malarial fever. As Miss Rogers wore trousers and her hair was bobbed, she found it hard to convince the natives that she was a woman. In one place all the women visited her to have their hair bobbed and she was kept busy with her scissors." It would be interesting to publish a fuller account from Oscar and we shall hope to give it to you at a later date.

In the meantime, good wishes for 1926!

PAUL F. SWASEY, *Secretary*,
Box 1486, Boston, Mass.

'20

This is written a few days before New Year's, so I'm wishing you an exceedingly happy and prosperous New Year, knowing that by the time this appears in print, New Year's greetings will be a bit belated. However, they make up in sincerity what they lack in timeliness.

I met Norrie Abbott coming out of Rich's Grill the other day and had a brief but pleasant chat with him. He promised to send me some dope about some of the gang around Providence — Johnny Nash in particular — but I'm still waiting for it. There was one thing Norrie did mention, however, that I don't think is too early to speak about, and that's the dinner we're going to hold in Boston at Commencement time next June. If you were at the Reunion you'll remember that we voted to hold a Class Dinner and most everybody said they'd be there, so we're counting on a big turnout and an evening of good fellowship that will be long remembered. If you weren't at the Reunion, this will be your chance to make up for what you missed. It may seem a long way ahead but then you'll have the pleasure of anticipation so much longer.

I seldom run into any '20 men around Boston. I did see Ken Roman but had only a chance to say "Hello" to him. And K. B. White dropped into the office just after he returned from a few weeks abroad. I'm waiting to hear from him as to his new location as he has left the Lambertville Rubber Works at Lambertville, N. J., where he has spent the last few years.

Count Dumas writes me an interesting letter from Quebec, where he now lives. His address is 182 Dorchester St., Quebec City. After graduation, he taught at the Technical High School at Three Rivers, Quebec, for a year. He was then transferred to the Quebec Technical High School where he now is. He is professor of electricity, applied mechanics, and geometry and also lectures on automobile mechanics. Here's one man who is making the most of his Technology training in contrast to the multitude of insurance, real estate, banking and butter-and-egg men of the Class of '20. Count says if any of the fellows are around Quebec to let him know and he'll show them the Quebec Bridge and other interesting spots. He goes on: "There are no spots wetter than others; the humidity is pretty constant everywhere, but we don't notice it very much, we are used to it. I only mention it to make my invitation more attractive to my friends in the Land of Liberty." Count was prevented from attending Reunion because of an educators' convention in Montreal but says he is strong for another Reunion and will sure be there.

Another good letter is from John J. Lyons who is now living in Jamaica Plain, Mass. He is with the National Fire Proofing Company, manufacturers of structural terra cotta, and is engaged in both sales and engineering work. His business address is 99 Chauncy St., Boston, and John says he would gladly welcome any or all members of the Class who would honor him with a visit. He travels around New England a good deal and would like to get in touch with any of the gang in these parts. I hope some of you fellows will write him and let him know where to look for you. And, John, you and other fellows who are traveling around like you are, ought to keep a register of former students with you for reference. If you haven't one, write the Alumni Office at the 'Stute and they'll send you one if they haven't all been used up. John has been married five years and has two lovely little daughters.

Perk Bugbee met up with Ed Brickett on one of his trips and learned that Ed is assistant engineer of the North Jersey District Water Supply Commission, address 20 Clinton St., Newark, N. J. — A

1920 Continued

Burke is married and settled down in New Britain, Conn., 667 Corbin Ave. He is with the Russell and Erwin Manufacturing Company. I went by the plant on the way to Waterbury the other day and was sorely tempted to stop off and have a good old get-together with him but had to stick to my schedule. Al writes that he had a card from Al Wason announcing his baby's arrival. Congratulations, Al! — I got a Christmas card from Bill Meissner from Paris saying that he was returning soon from a year abroad. These architects lead a tough life.

HAROLD BUGBEE, *Secretary*,
9 Chandler Road, West Medford, Mass.

'21

Ten degrees below zero and getting colder outside as these notes are put into shape. These cold thoughts contrast beautifully with the warm good time 1921 ensemble is scheduled to have this coming June at its Five-Year Reunion. Plan to spend some of your vacation with the old gang in Boston in June, or schedule a business trip to Boston at that time. However you work it, be there!

From R. J. Spitz, X, a splendid long letter came a few days ago. Dick says: "I watch with interest the '21 notes in The Review — when I can find them. And that's the point — guess the rest of the Class is about as negligent as I have been, but even before the New Year I am turning over a new leaf.

"I am at present living at 114 East 90th St., New York City, with Mrs. Spitz and Miss Spitz who will soon be a year old. If you're ever around that way let me hear from you. I'm now with the General Naval Stores Company, and, as my wife says, it has nothing to do with the navy or nothing to do with the stores, merely about the largest distributors of steam distilled wood turpentine, rosin and pine oil in the world.

"At the present time I'm trying to educate the cotton and artificial silk industry to the fact that pine oil is one of the greatest assets to their dyeing and bleaching operations.

"This 'great noteworthy work' compels me to go about the eastern and southeastern part of this country now and then, and in my travels have met not a few Twenty-oners.

"Bruce Rogers is still with the U. S. Finishing Company in Norwich, Conn. Understand he is quite a golf enthusiast. He claims he has no idea of matrimony but instead is busy supporting a Cadillac Sedan. H. C. Collins, '20, is also in the laboratory there.

"I saw Milford Graham, X, at the Boston Manufacturing Company in Waltham. He has charge of the dyeing at that large plant. — Harold Griswold, XV, is with the Griswoldville Manufacturing Company just the other side of Greenfield, Mass. This firm does not belong to any of his family as the name might imply. He has a responsible position there — also at home, as he is married. — Ran into P. B. Wendler, XV, at the Eddystone Manufacturing Company, Eddystone, Pa. He is in the mechanical engineering department. — The other night I was walking out of Danville's (Va.) leading hotel and I ran into W. R. Barker, XIV. He was merely touring the south on his honeymoon. — I will be in Charlotte tomorrow night and expect to see Arthur Silver, XV, who lately took up his residence in that city with Mrs. Silver, a Pittsburgh and Boston girl.

"I see Herm Schmidt, XV, frequently as he married one of my classmates of Brookline High School days. Young La Mont Schmidt will soon be six months old. Beginning January first, Herm will be promoted to merchandise manager of Lord and Taylor."

A letter like this is an example of a real help to your Secretary.

In an October Boston *Herald*, announcement was made that William B. McGorum, II, and Miss Mildred Holden of Natick, Mass., are engaged. The wedding is planned for this winter. — Last September in the First Congregational Church, Berkeley, Calif., Miss Alice MacGregor and Albert L. Edson, XV, were married. Following a large wedding the couple toured California, before returning to Boston where they plan to make their home. — Announcement has been made of the engagement of Miss Ruth T. Herrick to C. H. Talcott, XV. — Last November Miss Clarice A. Frechette of Leominster, Mass., and John T. Hull, II, were married at the rectory of St. Cecilia's Church, Back Bay. Waiver of the five-day law, after securing the license, was obtained by Johnnie and away they went. After a honeymoon in Bermuda for an indefinite period they returned to Boston to live. O! Wotta life!

Richard W. Smith, XII, for more than four years assistant state geologist of Tennessee has left to do a year's graduate work at Cornell University, studying economic geology.

Last October Cornelia Nelson, IV, became Mrs. Malcolm B. Lees.

1921 Continued

The wedding took place in Cambridge. Mr. Lees graduated from Course XV with the class of 1920. Good news and many happy years.—James F. Downey, Jr., IX-B, has left the U. S. Coast and Geodetic Survey and is a special engineer with the Bethlehem Steel Company.

To many it will be a shock to learn that on December 14, 1925, George B. Greeley, XIV, died as a result of injuries received in an automobile accident in Union City, N. J. Only a meagre statement from the Boston *Transcript* is at hand. At the time of his death George was a chemist with the Texas Company at Bayonne, N. J. He was with the Rockland and Rockport Lime Company at Rockland, Me., for several years before going to New Jersey. Kind thoughts and pleasant memories of him remain with us.

In November the engagement of Miss Mary W. Fraser of Brooklyn, N. Y., and C. C. Carven, IV, was announced. Chris is an architectural engineer with Stearns and Brophy, Room 1708, 25 Broadway, New York City.

On November 27, 1925, Richard C. Poole, Jr., arrived at the home of Richard C. Poole, IX. Congrats! Dick is an engineer with the Worthington Pump and Machinery Corporation, Third Street, East Cambridge, Mass.

R. A. St. Laurent, *Secretary*,
431 Oliver St., Whiting, Ind.
Carole A. Clarke, *Assistant Secretary*,
121 Shearer St., Montreal, P. Q.

'22

The General Secretary wishes to report that he cannot report what he wishes. The ideal situation, now that, as we write this, the New Year is about to dawn on us, would be to inform every one that the Course Secretaries have all come sobbing down the sawdust trail. There may have been some sawdust, but there has been no sobbing. At least if there has been, little of it has been audible in this office. We have, therefore, to present this month only the reports of those two brothers in crime: Heinie Horn and John Sallaway. When we say "only," of course, we don't mean quite that. Contributions from either one of these gentlemen are things to be preserved, cherished, appreciated and framed in gold. The "only" is inclined to be a reflection upon the percentage representation among the supposedly corresponding officers of the Class. Where, for example, this month is Roger Carver? Where is George Holderness? Where is Parker McConnell? But stop! This search is likely to prove embarrassing.

We must further confess that we have very little of our own this month in the folder. The most spectacular piece of news to report is a pleasant coincidence which occurred in the drab life of your Secretary in New York during the Christmas holidays. One afternoon your Secretary, being fresh from a reading of the notes of that James Gibbons Huneker *in petto*, which is to say, Mr. J. E. Burchard, '23, was stimulated to attend a concert of the New York Symphony Society at which George Gershwin's jazz concerto was to be played. He went to the box office, bought his solitary ticket, went in, sat down, being flanked on one side by a marble pillar and on the other by a vacant seat. Five minutes later who should amble into the vacant seat but one Arthur H. Fischer, Ph.D., whilom backbone of the Tech Show Orchestras of a happier day and now research chemist connected with something connected with the name of Guggenheim. We don't gather whether this something is the commercial establishment or the research foundation, and it is silly of us that we don't. In addition to these labors, Art is teaching chemistry to the young idea at New York University in the Washington Square College. Both these jobs he reports as highly congenial, and seemingly they offer him a moment or two for diversion into the bargain.

After having torn the concert to pieces, he and your Secretary retired a few steps east on 55th Street for a most amusing pot of coffee and a highly tragic brace of cigars. It will doubtless be noted by all members of the Class that human affairs have been progressing in all activities of endeavor much more smoothly, effortlessly and happily in the past few weeks. This is to be accounted for by our conversation, in which most of the problems which have hitherto baffled philosophic speculators were solved with a considerable degree of success.

Art is living at 528 West 111th Street, as is also Preston Robinson, who is similarly employed.

The only other '22 man of whom we heard anything during our metropolitan stay was Dave Minton, and we got no closer to him than

1922 Continued

to be told that he was out, but would return at three o'clock — which he didn't. Dave was kind enough to telephone to our family palace and we made the most strenuous efforts to telephone back, but the life of a stock exchanger is a speedy one and our slow-going academic pace never caught up.

And that, would you believe it, is all that we have to report on this month. We should like to have at least one post card to comment upon in the March issue and thus be saved the necessity of lifting pages bodily from the Congressional Record in order to make the voluminous Heinie Horn look small by comparison.

Final Five-Star Extra! Heine Horn, as these lines go to press, has accepted the General Chairmanship of the Committee on the '22 Five Year Reunion in June, 1927. Copious details in the March issue. Watch for the complete announcement.

ERIC F. HODGINS, *General Secretary*,
Room 3-205, M. I. T., Cambridge, Mass.

FIELD NOTES

Your Correspondent has several reports to make on the happenings since the last notes were compiled and computed. Some of you chaps who never write may be advised that the compiling must be done by the twenty-fifth of the month and as this computation causes the aforementioned Gensec much distress (I have seen it with my own eye: how he tears the hair, etc.) I am quite anxious that you forward many voluminous notes. (Make the writing as hard as possible to read.)

There are other reasons for this request. The Gensec has done everything — except bodily injury — to your correspondent and is at the very moment plotting more dark deeds.

When you go to Boston — as your correspondent was wont to do in November — the Gensec takes you out and *buys* you a lunch, he recites poetry — reams of it — tells yarn upon yarn — and so on. He even asks your advice on matters you know nothing about and upon matters on which you can therefore speak very freely.

You leave with the impression that our Gensec is an admirable fellow, an excellent judge of anything he may be apt to judge, and a poor driver in some instances. (It may be the apparent vintage of his Essex.)

But, alas! no sooner have you left than this Bozo is writing one of his passionate appeals to our most noble President, Donald F. Carpenter. Result: one more appointment — one more sucker. And those two birds believe in never giving a sucker an even break.

Friends, Relatives, and Fellow Engineers: be sure and pay for your own lunch — and if desirous of turning the tables pay for the Gensec's lunch. The arrow of indebtedness is then pointed in the proper direction.

Much as we disliked to tear ourselves away from the Gensec's hospitality, one cannot dig much dirt at the 'Stute so we turn to the work at hand.

The first week in December found the Power Show launched in the Grand Central Palace. Several of our members — whether they are in good standing or not is an open question for I hadn't the heart to ask them if they'd paid their dues — landed in with it. Our good friend Tommy Thomson got a seat right near the door. I cannot vouch for his reason for such a location, but it was a good one — I mean the location, not the reason.

Incidentally, here's an inside tip. Tommy's pretty sore and is thinking some of suing for libel. It seems some fellow wrote a little story for one of our big periodicals in which Tommy's good name appeared — also many other things. Tommy claims this particular chap was right in just one detail. That was when he inferred that Tommy fell asleep on some particular local train.

I used the Gensec's principles and paid for Tommy's lunch. Of course, I can't come out openly with the real story but I'd be glad to swap twenty-five cents' worth of good dirt with any customer. Drop me a line care of The Review. All odd bits gratefully received.

But the subject under discussion is the Power Show. On the second floor I found one Colby Bryden — a bigger and, I presume, better Bryden — demonstrating the Crane Packing Company's line. We rowed a few crew races over again, discussed business more or less, and then opened up on our coming Fifth-Year Reunion. Everywhere I go the boys are laying plans even at this early date for this biggest and best of all class Reunions. But we had a great pow-wow. Colby is selling in New York for these people. He had seen Plimpton but I missed him.

Another flight of stairs brought Wes Hammond showing the Diesel Engine for Worthington. Three less flights of stairs and three short blocks brought us to nourishment of which we were badly in need. An hour at a table brings to mind the names of many old friends and the thoughts of where they are. Again there was much talk of Reunion. After that Wes went off in the rain to his Power Show and I went off in the other direction in much more rain to much more than a Power Show — for I ran slap into Bill Pinkham. Bill had just arrived from Bridgeport and was very busy waiting. Being of a curious nature I accepted his invitation — or maybe he accepted mine — it's all more or less vague. Our waiting being highly successful, Pinkie suggested we go to the Power Show. Now, it may be that your Correspondent's idea of the Power Show was quite different from that of the tall youth with him, but at any rate we were delayed and when we got on our way the second time Bill's sense of the direction of the Grand Central Palace was rather general. But as Bill Lang has been wont to say on occasions of moment, "it was a fracas of large dimensions."

Pinkie offered quite a discourse on balmy Florida whose prosperity he spent some three months investigating for one William Pinkham. I understand that it was Bill's flivver that pulled in to Bridgeport bearing a large placard astern with words, "I believed in Florida and trusted in God — now I'm New England bound."

Pinkie now hangs his hat in Bridgeport — conducts productive labors for the Curtis and Curtis Company, manufacturers of pipe cutting machines, and hires and fires young college graduates. In short Pinkie is the general manager. Bill is another of the members in good standing who looks for great things in June, 1927.

This Gensec of ours gave your Correspondent explicit instructions to search the subways very carefully in this nation wide hunt for lost, strayed, and stolen brothers. It was the morning after Pinkie's Power Show that I had the luck to ferret Paul O'Brien out as he strolled from the Shuttle to the East Side Subway. Paul explained at some length that he was not lost but was a peddler like the great majority of us, with a set desire to sell New York lots and lots of paint, and that he was still single. His peddling is for the Aluminum Company of America. Next spring you'll be hearing about a "Paint Up Week" in little old New York.

That noon Jack Teeter and I held a conference at the corner of Madison Avenue and 42d Street. The conference got very important

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so we moved up to the Club. Jack is now with the Guaranty Company of New York. He left Allentown and the Pennsylvania Dutch some time ago and is pretty strong for this job.

The second week in December we again visited the City of Brotherly Love and can safely say we are going to let the members in good standing in on a great mystery very shortly.

Your Correspondent arrived in time for the usual bridge session on Monday night, having wired Deck Shaw to deal a hand. But upon arrival Mr. Shaw's Secretary informed me he was "out of town." Well, everybody can't have a secretary so I gave Andy a buzz and he was in. Then I called Crew Levick Company and Mr. Sallaway's Secretary told me he was "out of town." This was too much. Your Correspondent confesses to know much of these gentlemen's habits and it has often been the case that Deck and John have set out for a week-end each with a different point of destination, but with the same objective. And it has oft been the case they would hang over and not return 'til Tuesday. Blue Mondays are very bad things in General Butler's town. At least, Mr. Sallaway says it was ever so.

But on Tuesday the patent lawyer Shaw put in his appearance and gave an excuse. There's no question about it, it was an excuse.

The days slipped by and the Secretary handed out the same line. Andy got so worried about Jack one night that he couldn't keep his mind on a friendly game of twenty-one and Mickie Mink became a very wealthy man.

Your Correspondent felt it his duty to the cash members of the Class and a possible encouragement to the credit customers to make a complete investigation. The following facts have been gathered: That Mr. John Sallaway left Philadelphia at a rather unusual hour. That he left no forwarding address. That he was seen near the court house of a "foreign city." That he was known to have been receiving almost daily scented epistles presumably containing words of no account. That Brother Sallaway was a very fast worker, and it is conceded by his bridge friends he could accomplish much in one week's time or less.

In addition your Correspondent recalls a conversation with Jack regarding the coming class Reunion, at which time this young man of many affairs came forth with all his powers of eloquence and practically demanded — in a nice way — that all cash customers be allowed to bring their wives to the Reunion.

Tommy Gill insists that Jack knew his tomatoes — canned or otherwise — but there is but one conclusion can be drawn. I expect to be present in Philadelphia next week when the boys welcome John, et cetera, home.

H. J. Horn, Jr., *Field Secretary*,
47 Center St., Kingston, Pa.

Course II

At the suggestion of the Gensec, Course II is to be given an opportunity to grab the public eye monthly in The Review, rather than bi-monthly. Of course, our acceptance of this kind offer is dependent on material to justify the space. Nevertheless, the Course Sec will just pass the buck and tell his nibs that Course II will make a monthly reservation for one thousand words. Let's come through on this, now, fellows. Hop to it!

We must make a copious draft on our abundant supply of congrats and ship them to Mal McGhie on his engagement to Miss Elizabeth Drake Platt of Montclair, N. J. Mal stepped out and told the world all about this last October in the Boston *Transcript* and the New York *Herald-Tribune*. Mal is with the McGraw-Hill Company in New York City.

From the Estate Quesqueya, San Pedro de Macanis, Santa Domingo, D. R., Andy Ronkanen drops a line wishing every one a Merry Christmas and a Happy New Year. There's no Santa Claus in his country, according to Andy. The main excitement on the sugar estate where Andy is assistant engineer is an occasional brawl. He mentions the most recent one in which six were counted out as dead and nine disabled after the final check up. Nice Neighbors. Our only advice is to stay at home nights and say your prayers, old boy.

The meeting of the Philadelphia Technology Club on December 15 brought out quite a representation from Course II. Mink, Powell and Smith held the banner high.

The Secretary has a new address to try out. See if Crew Levick Company, Titusville, Pa., will draw more notes than the previous headquarters. We have the best refinery in this part of the country, here in the above mentioned metropolis of 9000 population, and the scribe has plenty of time to answer mail if you will only give him half a chance.

John E. Sallaway, *Secretary*,
Y. M. C. A., Titusville, Pa.

'23

With the February Review we reach the halfway mark for the year's class notes and the imagination of the Gensec and the Course Secretaries is beginning to show a marked deflection under the load that is being imposed upon it by the lack of communications. Since our factor of safety is very uncertain, news of some sort or description must be forthcoming immediately from our hithertofore dormant members or we will have to let a few numbers of The Review be issued without any '23 notes. We certainly hope that you will not permit such a thing to happen. The matter rests equally on every individual in the Class, and we are looking for your response.

ROBERT E. HENDRIE, *General Secretary*,
12 Newton St., Cambridge, Mass.

COURSE IV

The crowd gradually sifts in, some in evening dress, most without; combined perfumes of Kerkoff, Paris, brilliantly enunciating the fact that each perfume of milady's toilet must have the same odor, of various brands of garlic which prevail in Little Italy, of vino, ravioli, spinach, and cold cream, rise to the gilded chandelier. The orchestra straggles its weary way into the pit. The dishevelled conductor takes his place at the desk and lifts his baton. The fourth act is beginning. Shortly after this there is a break in the music. The Duke of Mantua, booted and spurred, seats himself on Maddalena's table. The orchestra, roused from its lethargy, gaily strikes out into "La Donna e Mobile" — tum tum tum, *tee* ta tum; ta ta ta, *tee* ta ta; um bum bum, um bum bum. The music stops. Think of the many times you have wondered why that pause was there. Listen and we will tell you.

At the time that Verdi's opera was first produced, the city of Milan was in a frenzy of operatic enthusiasm. Members of the Junior League of that city bribed servants in the household of every composer to give them advance notices of the music to be performed. Thus it frequently happened that when the first performance of an opera was given the audience knew the music better than the cast. While that does not seem to be an embarrassment nowadays, it was then. Verdi determined that this mishap should not occur to his principal air. Carefully he rehearsed in private with the tenor. The orchestra prior to the opening night had just as much of the score as we have played up to this time. When the piece began the audience, of course, began whistling it too in the quaint custom of the time. When the pause came, they too must pause. At that point Verdi, standing on the rostrum, turned around and thumbed his nose at his audience. The music then continued. So too we.

Despite the prolific libels of our last letter, no David has arisen among our people, no angry constituent has written in to demand retraction; in fact, the quiet of our office has only been disturbed by the sizzling of an uncleaned pipe and the occasional banging of a typewriter key. We are reminded at this point that "occasional" is perhaps not the word. Of course, no news is good news, but we suspect that no news in this case is something like that paucity of eventful happenings which is so brilliantly summed up in the little story of what killed the dog.

Oh, yes, there has been one letter and that from that eminent raconteur, John Ward Beretta, but instead of rebuking us for lying about him he sent us a good luck letter, no less. It was one of those things that someone who was not very busy started once and which is still bounding around the world, upsetting the business and the peace of mind of many people. The idea was, as near as we could get it, that if you copied down a list of names, some 3000 long, nine times and added to each copy your own name and sent one copy to each of nine people to whom you wished good luck (if there were that many) you would get some good luck pretty soon afterward. It seemed like a lot of work for a little luck. We wrote a very polite letter to Tex informing him that we were no prey to any of the popular superstitions or any of the current fancies either of the George K. Babbitts or their counterparts, the H. L. Menckens. As a matter of fact, we were mediævalists. We were quite certain that if that sort of thing had gone on in "The Heart of Europe" the gargoyles of Notre Dame would not have got carved. The very day we sent it back to Tex the Yale-Harvard game was played and you can draw your own conclusions. We forgot to say that in addition to Tex's name on the letter there were several Russian and Japanese admirals and lieutenants.

Speaking of Tex, of course we do owe him an apology. He never was, alas, a younger and more sprightly Pancho Villa, but he would have looked well, wouldn't he? As it is, he is one of the most important cogs, or shall we say rivets, in the machine or structure of the American Bridge Company. There is reason to suppose that the Philadelphia-Camden bridge would not have got to its present stage had not Tex been at hand to aid the company with the information he gleaned from a well-known thesis on the effect of holes in the neutral axis of an I-beam. You remember all the little holes, no doubt.

The person of imagination, which we are not, can glean a good deal sometimes from musty information. A small card came to our office which merely informed us succinctly that the address of Mr. John C. Todd had been changed to 903 Sunnyside Ave., Chicago, Ill. Thus the unimaginative Mr. Denison; but behind that white card how much may have happened! Perhaps the warm breezes of Cincinnati were proving soporific. Perhaps the beer in that city of Wienerschnitzel and Kartoffelsalad was not what it used to be, so one day when the beer had been especially bad John probably picked up a pamphlet which said, "Come to Woodbine Manor on beautiful Sunnyside Avenue, where the waves of Lake Michigan lap the kerbstone, where there is air for all and sorrow for none." The picture was too much and John packed his slide rule and other paraphernalia and started for the land of better beer and murders.

About the same time, apparently, Bob Colburn shook the somnolent southern dust from his Walkovers and came back to the birthplace of Henry Cabot Lodge. Just why he did or where he is, you may know better than we.

Pointing this out reminded us of Louis Metz and immediately of course of Van Hare, and about all we can do for you as far as they are concerned is to give you their addresses. Mr. Puzzolan still hangs his fur coat at 3625 Dewey Ave., Omaha, though why any one who lives in Omaha would want a fur coat is beyond us. We spent one Fourth of July there. Van is working at 74 Porter Building, just 'round the corner from Beal Street, Memphis.

And now we come to the close and to one of the most touching ironies of circumstance that it may ever be our sad luck to record. You will all probably remember the early days of our school life. You will remember how John Alexander Frank was an extremely earnest Option 2 man, how his slide rule was longer and oilier than anybody's else, how his pencils were harder and sharper, how his computations were more voluminous and neater. You will also remember Lloyd Westbrook's bursting upon us from Cornell like the *Cornell Sun*, how

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premium after premium fell into his capacious maw and in particular how he won an appalling number of points with a design for a small bank which there was reason to suppose was not uninfluenced by the work of the well-known York and Sawyer. You saw them, as we did, growing up, changing in ideals and ideas, as time went on, but the dénouement you have yet to hear.

Now it can be told — the reason why, I mean, that we are reminded of these two promising youths. The other day the orchestra played Brahm's Academic Overture. You all recall the stirring finale of that music with its brilliant dramatic treatment of "Gaudeamus Igitur," that perennial favorite of matrium almarum (Latin scholars please neglect). Well, there was a time when "Gaudeamus Igitur" was sung by Lloyd to bad advantage. There had been some kind of a party at Ida's and when Lloyd and the writer walked in on it, J. A. Frank was sitting on the floor talking about architecture and Georgevitch and Berla were listening intently. A little later it was decided to take John home. It was done by the whole group with the exception of Ida and Frances. Everything would have been all right except that Lloyd and Ilya insisted on singing "Gaudeamus Igitur" in the dormitories, young ruffians that they were. John deplored the fact, of course, stating very firmly that that was no sort of thing to do in a Technology place, probably somebody was studying or sleeping, and in any case it was not advisable to waken latent passions. And now comes the final chapter, for John A. Frank has been for over a year designing premium banks for York and Sawyer and has eyes on Fontainebleau for next summer, while Lloyd, who theoretically maintains an architectural practice, is undeniably teaching in night school. "And what is he teaching?" you ask eagerly. The overwhelming blow! Structural design, including rivet pitch and sheer and moment curves. In the words of Aubrey Piper, "'Sic transit gloria mundi!' We're here today and gone tomorrow." Happy birthdays to you all!

J. E. Burchard, *Secretary*,
82 Browne Street, Brookline, Mass.

Course VII

It was very encouraging and delightful to receive so many letters from the gang following my fervent appeal for news.

Herman Swett, who has apparently been in seclusion for some time, has been found at his office at 11 Beacon St., Boston, where he is established in the real estate and insurance business. He confides that his days of single blessedness are nearly over but does not mention who is going to help him take the profits from the P. and L. sheet. Anyway, Swett, let's hear from you once in a while. For all you know some one in the gang may get a couple of bucks together to throw down on the Little Building, or eat some oysters that taste funny and decide to take out insurance before symptoms appear. You never can tell!

Phil Riley writes that he and Bernie Proctor are office mates occupying the former habitat of Dr. Sawyer, which has been remodeled into a businesslike office and laboratory. Phil also gives out the glad news that the Junior Class is showing the excellent judgment of placing twenty members in Course VII. Phil is teaching General Biology, Zoölogy, Botany and Bacteriology.

Bernie Proctor is teaching a course in mycology and continuing his work at the Institute. He has successfully passed his orals and we may expect to have a distinguished personage among us in due course. — Gerry Fitzgerald writes from Washington that he expects to head either for Florida or Texas in the near future, continuing his fisheries investigations. He states a preference for Texas but with each day more forcibly impressing upon us that winter is here, I have sneaking suspicion that I wouldn't be particular. Anyhow, I don't know anyone in Texas as Gerry apparently does. All right, Gerry, I hope you land in Texas.

Milt Parker gave a very interesting talk at Newark a few days ago before the local health officers who, by the way, had as their chairman Carl Pomeroy, Health Officer of Montclair, N. J., and a former Course VII man. I understand that Milt is hobnobbing with all the other dairy experts in this section of the country. Milt has several papers in the course of preparation which, it is hoped, will be ready for publication shortly.

As far as I can find out Nelt Fuller is the only VII-'23 man who has so far been quoted in the newspapers and the quotation consists of "Well, I was lucky." The Newark *Evening News* tells the world how Nelt recovered his wallet and other valuables at the psychological moment. Hence the remark. We also hear a great deal about the good work he is doing with the Montclair Board of Health and notice that his name ornaments a conspicuous corner on the stationery of that or-

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ganization. We get together occasionally and deal a few mean no-trump hands.

I have been unable to get any word from Tom Duffield. — Al Ellsworth, '21, finds time from his globe trotting activities to remember us all with communications from Rome, Paris, and way stations. Thanks, Al.

My excuse for living remains unchanged as I am still connected with the White Tar Company, where moth preventives are the main products of manufacture. I hate to force business into this column but suggest that all persons interested in my future will not kill clothes moths. Just shoo them out the window and give 'em a chance at some one's else clothes. You know that helps out the business!

E. A. Griswold, *Secretary*,
Apt. 18–317 William St., East Orange, N. J.

Course XIV

This call of the Gensec found your Secretary a pretty busy man and the date of publication allowed little time to scrape up dope for The Review. Therefore, we present these few available notes for what they are worth and simultaneously send out an appeal for material to use in our next issue.

A letter from G. G. Kearful, written from Detroit, Mich., after he resigned at The Edison Electric Illuminating Company of Boston and made his début on the payroll of Parke, Davis and Company, states that his job is anything but a white collar affair, but he commented that after all this starting at the bottom is a great thing. So now we find G. G. in the pharmaceutic chemical game! Kearful says "there is more sucker money in this city than any other in the old U. S." and invites all looking for such to come over.

Nothing yet has been heard of our friend Haueisen, but we learn from the Technology Register of Former Students that one Batist Ritzinger Haueisen is an apprentice with the Citizens Gas Company at Indianapolis, Ind.

Oscar Perkins dropped in to see the Secretary not so long ago and would you believe it, he now parts his hair in the middle and sports a demi-moustache. Oh, boy! He said he left the Technicolor Motion Picture Company the middle of last January and got a job almost immediately with the Hygrade Lamp Company of Salem, Mass. He had a pleasant job in development and research on incandescent lamps. He says he is not yet married and calls it a boast. He vouchsafes the same for Brownie, who by the way is still with Dennison in Framingham. — A card received from Oscar not long after his visit said he was working for DuPont-Pathé at Parlin, N. J., where he is living at the DuPont Club, same being of the college dorm variety. The note abruptly ended because of the arrival of Bevo for a little stag party.

The Secretary has recently had some interesting work in studying the possibility of using the heat of the earth's interior for power purposes.

This writing is well before Christmas and will appear long after New Year, hence you see the difficulty of sending the season's greetings, but the spirit is the same, so here goes.

Frank M. Gentry, *Secretary*,
130 E. 15th St., New York, N. Y.

Course XV

There has been a great deal of idle chatter, on various occasions, by well meaning but sadly misinformed folks to the effect that the Westerners are a more sociable lot than the Easterners. Well anyway, some of them ought to crash through next time with a little dope or they are very liable to be inaccurately chronicled by editor No. 1523.

Al Hayes is in North Andover, teaching at the Johnson High School. He is making a happy combination of business and pleasure in teaching math, and coaching track and everything else.

There are two fifteeners to record in China. Jim Brackett is with the freighter service of Standard Oil, under a three year contract ending in December, 1926. Richard Tang is teaching in the Fuh Tan University in Kiangwan, Shanghai, China. We haven't any definite dope on P. Y. Tang, but it is believed he is doing similar work.

From around Boston: We have it in writing that our cosmopolitan classmate, Ab Johnson (yessir, Abbott L.) has married Elizabeth Lamb Gregory, and now good old Ab is a new man. He was contemplating moving to San Francisco to locate with the trust department of a bank. The good wishes of a host of friends go with him.

Bob Hull is in Hartford, living at the Y and working for the Crew Levick Oil Company. Nearby in Providence, Ben Harris is with the James H. Tower Iron Works. "Very Single — Health Good." — C. P. Jackson was recently married to Janet Mitchell, Radcliffe, '27. He is working for the New England Structural Company, doing industrial engineering in the drafting room. He was formerly with the General Electric at Lynn.

Win Dow is in Boston selling for the Aluminum Company of America. He writes, "Working hard and getting ready for the coldest winter in Boston for seventy years." His engagement to Miss Ann Merrill of Newton Center was announced in October.

Pen Howland is production engineer for the Iver Johnson's Arms and Cycle works in Fitchburg. — Ray Holden is with the W. H. McElwain Company, branch of the International Shoe Company, setting piece rates, at that cold neck of the woods, Manchester, N. H. — Ray Brink is in Northampton, Mass., with the McCallum Hosiery Company, "building up a quality control system, developing standards, specifications, etc. If any of the boys call on Smith girls I would be very glad to bunk them up." Bill, with your technique, you should never call for help at this early stage of the game. — H. C. Ludeke is in Andover, Mass., with the Tyer Rubber Company. He is the New York State sales representative. "Matrimonial prospects depend on business prospects." There is a man of ability and perspicacity!

Around New York: A. L. Carvill is in East Orange working for the Public Service Electric and Gas Company. He was married on October 15, 1924, and still seems quite cheerful. — George King has kicked the engineering traces and is in the credit department of the Chemical National Bank in Brooklyn. — Johnnie Nason is in McKeesport, Pa. He is manager of the Columbian Foundry Company. "Married and seventeen children." Just see what that smoky Pennsylvania atmosphere will do!

Out West: Charlie Dutton is out in Cleveland with the D. S. M. Refractories Carborundum Company. — Joe Lund is still in St. Louis with the International Shoe Company, in the payroll department. He is traveling quite a bit, working on the payroll costs for seventeen different factories. "Matrimonial prospects nil." — Howard Doster is in Chicago as a sales engineer for Hanna Engineering Works. — Al Brantingham, out in Rockford, Ill., is assistant superintendent of the Emerson-Brantingham Company.

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Winkie Quarles is with the Ingersoll-Rand Company in Philadelphia. He is now known around the office as a sales engineer. — Tex Bremmer has been living at the Beta Theta Pi house on the University of Pennsylvania campus for the past few months. He is just finishing up on the new Delaware Bridge between Philadelphia and Camden which is being constructed by the American Bridge Company. Tex certainly must have obtained some great experience on this job as it is the longest suspension bridge in the world. He is going to San Francisco soon with the American Bridge.

F. L. Cronin is in the contracting business with his father. He says that they have just finished the plumbing contract on the newest Philadelphia office building, the North American Insurance Company's building.

The tale is told. Thanks loads for the response to the cards sent out. And when any one gets hold of a piece of fifteen '23 news, shoot it along to Rochester, and get the $500 reward of the glad small voice that's so hard to tickle.

EDMUND H. MILLER, *Secretary*,
547 Lake Ave., Rochester, N. Y.

'24

Two innovations this month. And I hope you approve of both of them. Their object is to improve the quality and quantity of these notes. As long as you fellows are paying to see the notes we want to maintain the notes at a standard which will assure us of your long continued patronage.

The first innovation is that of the "President's Letter." It has been over a year and a half now since you put Bill in office and very few of you, I imagine, have heard from him directly. As one of your lawfully elected officers it is his duty to inform you from time to time of the state of affairs of this Class of ours. Isn't that the major function of the corporation presidents which he mentions? And so we have arranged to have him furnish this so-called report every six months. I hope you will enjoy reading his letter. I did. And these letters of his will give you a little bit more to look out for when you get The Review. His next offering will appear in either the last or next to last issue of the year and from now on we will print his letter twice a year.

The second innovation is that we have divided the Class into two groups, each group to present notes to you on specific months. Courses I, II, III, IV, V, and VI have been assigned to the months of November, January, March and May. Courses VII, VIII, IX, X, XIII, XIV, and XV have been assigned to the other months, that is, December, February, April and July. This, you see, is patterned after the procedure of The Review. Now you will note that their plan is more for the benefit of the smaller classes than for the larger since all the latter contribute each month. Such is the plan that we want to work out within the Courses of our Class. The larger Courses, which you will note have consistently had notes in nearly all the issues, are being encouraged to continue in this practice and submit notes every month, even though it may not be their "due" month. On a smaller scale we can build up our own "eight-issue club." The plan is for the benefit of the smaller Courses, which having had no particular month to account for, have been rather spasmodic in their appearance. Thus by designating for these Courses the months when we all expect notes from them we may be able to amplify their notes and thus increase the utility of these columns.

The point which I want to call to the attention of each of you is that if you see your Course as an absentee when it should be present, you may be partly to blame in not supplying your Secretary with material to make notes. And here is a rule for you in such cases. Immediately upon seeing your Course with a small representation or none, you should sit down and write a letter to your Course Secretary. The machinery is so arranged that he will get the letter just in time to make up his notes for me to get them, and then completing the chain, I will send them just in time to get them into the next issue in which they should appear. Thus by your act you insure your Course having notes the next time it should. And after we have been able to put your Course with the regulars the rule to follow is to write a letter to your Course Secretary every time your Course appears upon its "due" month.

The Courses which were expected to contribute this month but failed are listed here with the addresses of their secretaries: Courses VIII and IX, Jack Cannon, Hotel Manville, Manville, N. J.; Course X, William B. Coleman, 40 Morningside Ave., New York City; and Course VII, Philip K. Bates, M. I. T., Cambridge, Mass. Course XI reports with Course I and Course XII with Course III, and so next month's issue is the one in which they should appear.

Bill is certainly right when he says this is the "best Class that ever left tha 'Stute." Our campaign for at least eighty-seven more members of the Association is humming right along. Just this evening I received a letter from Dennie giving the standings of the classes, and let me tell you about it. At the beginning of the year we were in eighth place. Now we are in third. And in climbing from the first to the second position, no class which was previously below us has climbed ahead of us. That is, at the beginning of the school year 1890 and 1925 were in first and second places. They still hold these positions. We have passed in our own climb five other classes. Isn't there something we can do to keep up the good work and pass the two remaining classes? Our net increase was 5 per cent from 25.8 per cent to 32.8 per cent which, by the way, is a larger net increase than any other class made in that time. Let me assure you that if we keep on with the good work as we have started, by the time we have reached our quota of eighty-seven (which you will remember is the minimum amount we can be satisfied with), we will unquestionably be in first place. We are on our way and thirty-two more men will do the trick. Help the Course Secs out and see if you can't get one of them.

And now to proceed with a little personal gossip that I have been able to pick up in clippings or otherwise. Brown, VI, is now in Hartford with the Hartford Electric Light Company to my delight, as he is the only other '24 man that I know of in this city. Shaw and Schooler are next door in New Britain but I see them very rarely. Brownie and I went to a movie the other night, which would put a strain on any one's mental capacity, and we listened to some vaudeville singing which, if measured by the strict standards of the Institute, would certainly get FF. Brownie may be addressed at the Y. M. C. A., and he would be pleased to get any letters, as also would your General Secretary.

The Boston *Advertiser*, always featuring the startling news of the times, has this to say: "Search for Alice M. Corbett, missing Smith College Junior, led yesterday to the discovery of the romance and secret marriage, Saturday, of Catherine Bartlett Orear, Back Bay heiress, and John Dow of Reading, under cover of the Harvard-Brown game. The wedding was discovered by those investigating the disappearance of Miss Corbett, who were told by the officiating clergyman the girl he married closely resembled photos of Miss Corbett." Dow is with the N. E. Telephone Company.

1924 Continued

From the Boston *Herald:* "Miss Mary Southam Smith, daughter of Mrs. Rollin Overton Smith of Syracuse, N. Y., was married in the Leslie Lindsey Memorial Chapel of Emmanuel Church, last night, to Horace Ingraham of Augusta, Maine." Course II claims him as one of its members. The newlyweds are to live in Augusta after the honeymoon.

The Springfield *Republican*, the Springfield *Union*, and the Rochester, *Democrat and Chronicle* all have lengthy accounts of the marriage of Kendall Castle, II, to Miss Dorothy Johnson Gill of Holyoke. Picking the essentials out of the orange blossoms, the satin gowns and the rice, the ceremony was performed on Saturday, September 26, in Holyoke by Rev. Edward A. Reed and Rev. Robert Russell Wicks. Castle is now an engineer with the Rochester Gas and Electric Corporation.

And just to demonstrate that official sources are not the only ones from which I may receive clippings, here is one that my mother ran across in the Boston *Globe*. "Mrs. Jennie Brunt, of Cambridge, has just announced the engagement of her daughter, Miss Elsie Irene Brunt to Henry Gilmore Brousseau. Brousseau is from Course X and is now a chemical engineer with the Hood Rubber Company of Watertown." As the *Globe* characterizes it, this is another romance of the motor industry as Miss Brunt was employed by the Henshaw Motor Company. The marriage was set for December 11, and after the honeymoon they will reside on Langdon Ave., Watertown.

Again, we come to the point where I must turn you over to your individual Secretaries. And now that Christmas is nearly upon us I am minded that last time I should have wished you the season's greetings. Please accept them now with the sincere wish that the coming months of the new year will bring you all you hoped for which the last month has not already brought.

HAROLD G. DONOVAN, *Secretary*,
80 Farmington Ave., Hartford, Conn.

PRESIDENT'S LETTER

Hello, Gang! Hasn't it been a deuce of a while since we graced the old 'Stute with our presence? Doesn't it warm the cockles of your heart when you run across a classmate?

They miss us, too, back at the old stamping ground (who said it was a good miss?) The old place will never be the same again. They've hung crape on the dome, no riots, no trouble, no excitement, and no accomplishments.

Much water has flowed under historic Harvard Bridge since we departed and many things have come to pass, some historic and otherwise. The number of corporation presidents accruing to our credit has been a bit slow perhaps, but no one can keep track of the number of marriages and additions to the families of our brethren. Everywhere we hear glowing reports of a buddy doing some big thing and everyone has something to his credit since graduation.

You know, fellows, being an officer of this Class is a pleasure because of the support which you accord us on every opportunity. You can rest assured that you will not regret this help you give a single whit. There are one or two items of class interest at hand which you should know.

Nineteen Twenty-four has established a splendid reputation with the administrative officers of the Institute for doing things and doing them well. We must justify and maintain this faith. During the year 1924–1925 we led all classes in the percentage of men enrolled in the Alumni Association. We have slipped a bit in this regard and need several new members to regain our leadership. This membership includes a subscription to The Review, a leader among college alumni publications, the feature of which is the 1924 class notes. Need we say more? Thank you!

A real accomplishment of our Class has been the 1924 Endowment Fund. The results so far have justified the faith of your officers in the undertaking. But we will all regret it if the plan is not 100 per cent completed. So let us each resolve: first, to support our class plans individually, and second, to boost these plans with every 1924 buddy we meet.

We are rightly proud of our class history so far. The name of 1924 is prominently emblazoned on the Institute's escutcheon. Let us carry on the good work.

With wishes for the best of luck. Yours in '24,

W. H. ROBINSON, JR.,
8 Edmands St., Somerville, Mass.

COURSE I

Allah be praised! For, since your Secretary offered up his last meagre contribution to this august publication, letters have been arriving with three of the four winds. Nobody east of Boston seems to have much to say. Your modest Secretary wishes to assume some of the credit for the size of this month's display. About a month ago he was stranded in the wilds of Taunton while working on a valuation job. Wellesley was too far for commutation and the streets of Taunton didn't look safe, so one evening he decided to stick in his elegant quarters in the Taunton Inn and compose sweet "billy doos" for his beloved and misguided coursemates. These missives were written on penny postcards 'tis true, but they had the desired result and your Secretary is so encouraged that one of these fine days he is going to make another sally. Perhaps, gentle reader, you will be one of his next victims.

But to get at the meat of the matter — we have on hand five dispatches from the Disassociated Press. To conserve space and your time I have edited these letters, cutting out the personal allusions, and will merely give you the choice bits which disclose the heights and depths which our erstwhile fellow laborers have reached.

One T. M. Nevin was the first mortal heard from. In previous issues I have hinted at Jack's location and occupation and I now have an authentic record which enables me to go into more detail. Enclosed in Jack's letter were three photographs marked Exhibit 1, 2, and 3. Exhibit 1 portrays a bit of the thickest undergrowth any Course One-er would ever want to encounter. Exhibit 2 is the likeness of two little Seminole Indians. For protection of Jack's fair name it is only right to state that they seem to be about age two and three. Exhibit 3 shows one seven-foot rattler being held by the tail by a man in overalls. Jack says, "I sure was glad to get your note. Of course, like all the rest I suppose, I have been meaning to write you all the time but didn't until your note reached me at a time when I could 'do it now'. Here's the dope: Title, (ahem) resident engineer in charge of construction. Work, (lots of it) building the extension of the Atlantic Coast Line from Immokalee, Florida, to Deep Lake, Florida. This is a mighty interesting piece of work as the line runs through what is known as the Big Cypress Swamp, which is the only one of its kind in the world. It is marked 'Unsurveyed' on the map, — which is a complete lie as I have, with my own fair hands, driven more stakes in that territory

1924 Continued

than there is in a radius of six miles from the Summer Camp at Machias, which puts it in a class with some mean competition. And while speaking of Machias, if you think you ever had any cutting to do while idling the summer away at the famed summer resort of Course I, take a look at Exhibit 1 and praise him from whom all blessings flow that you had none of this. Exhibit 2 is a picture of my little Seminole Indian playmates. Exhibit 3 is seven feet of wicked rattlesnake, shot by none other than myself with my trusty, if somewhat rusty, .38. I won't tell how many shots it took nor how close I was, but suffice it to say that he is well dead, his hide reposing at this moment on my office wall. I am at present in camp at Immokalee, but will move on down into the swamp as the grade is laid. We build our camp houses 10 x 16 and mount them on skids and drag them with a tractor when we move until the swamp is reached. Then we put them on barges and float them behind the dredge. As to your queries: The golden spike will be driven about two years hence, maybe. Still single, but no fault of mine.

T. P. Bailey made himself heard from Lock and Dam No. 52 O. R., Brookport, Ill. His letter rivals Will Rogers for humor and so will bear repeating. "After reading in the last Review that you had voluntarily jumped head-first into a lot of trouble by getting engaged, I thought it was my humble duty to lighten your other burdens, so I am spilling you all the dope I know about the wandering wrecks from Boston Tech. Larry Feagan is at Muscle Shoals as junior engineer and from what some of the boys at 52 say, he has a pretty responsible job. — Last Spring Sam Schulitz was in Buffalo working for the Government doing something to the water in the St. Lawrence. Never did discover just what. Expect he is still there. — Georgé Tapley threw up his job with the Dixie Construction Company and came to the United States Engineer's Office at Louisville, Ky., as junior engineer. That is the main office of the Louisville District and does the office work for six locks and dams on the Ohio River. — Wallace and Sibert, '25, are inspectors on Dam 52 O. R. — Worthington is with Tapley in the Louisville office. Myself — after working out-of-doors in New England putting up filling stations for the Gulf Refining Company until it got cold, went to Washington, D. C., working for the Senate Committee Investigating the Department of Internal Revenue with J. B. Robbins and Abe Kenney, '23, and Ollie Mills a '23 mining engineer. When that blew up I came to Lock and Dam 52 as a junior engineer and assistant to the engineer in charge. Since then I have been consuming government beef and eating unhatched chickens and saving money toward that future date when some misguided female picks on T. P. to be her meal ticket."

Dick Lassiter came out of hiding and wrote from Erie, Pa., where he is working for the Henry Shenk Company. Just what he is doing them for he didn't say but here is some of what he did say, "The summer of 1924 I spent traveling through the Southeast. Then, in the early fall, I entered the employ of the New England Telephone and Telegraph Company as an assistant engineer in connection with the appraisal of their property. In the early spring of this year I went to the Pennsylvania State Highway Department on a nine-mile stretch of road in the northeast section of the state. The road was through a very mountainous territory, and I had charge of the grading. In July I came with this company where I am in the main office doing engineering design and estimating work. That sums up my activities to the present time. My room-mate, Joe Wickham, is with the Pittsburgh-Des Moines Steel Company at their Pittsburgh office, and is working in the structural division. Ed Moll is now at Pepperhill, Me., with the Pepperhill Textile Company. About ten days ago I ran into Sam Schulitz in Buffalo. Sam is looking just about as he did when he graduated. He is in the civilian employ of the U. S. Engineer Corps and is stationed at Buffalo. He can tell you all about the water going over Niagara Falls."

Our Western correspondent, Boyd Oliver, reported a few days ago. He not only sent some news of himself but also a check for his alumni dues. May his action serve as an example! Boyd is with the East Bay Municipal Utility District in Oakland, Calif. Boyd's history runs thusly: "Shortly after graduation I started with the California Oregon Power Company as field draftsman on a location party. Later in the year, about Christmas, I was transferred to the main office and was given the title as assistant, Engineering Department. The title meant nothing except a lot more work, and especially the regulation of Klamath Lake. When this East Bay work started I managed to get on and now occupy the position of field engineer over twenty-five miles of pipe line. So far, our work has been of a preliminary nature but I expect construction to start by the first of the year. I have only seen

1924 Continued

two Technology men since I've been out here, Jerry Nauman '23 and John Liecty '24, both Civil men. Nauman was working in Seattle on some valuation work. Liecty was working for the California Oregon Power Company on the construction of the Copco 2 power plant. In spite of everything I'm still single and expect to be for some time to come. Mail sent to me in care of the East Bay M. U. D. at Pittsburg, Calif., will reach me."

I finally reached Lank Harris in my own home town. His is a tale of many wanderings and should prove as interesting to you as it did to me. "Your card, for which I thank you, together with your heart-breaking appeals in The Review have so unnerved me, that in order to appease my conscience, I shall herewith reveal the sordid facts of my existence since leaving that noble institution on the Charles. It is the usual tale of bewilderment and wandering. For a while I worked in Wisconsin in a foundry, as a flunky for a Polish core-maker. Then I returned East only to meet the hatless Mr. Dick Eaton returning home from a tour around the country. Now knowing what we wished to do, we cast off in his flivver and ended up by spending the winter up in back of Mt. Shasta as chainmen on a large hydro-electric development. We worked seven days a week and slept very well nights. There was little else to do. In February, I hopped the U. P. for New York, when after working as a credit investigator for a bank on Wall Street, I entered the employ of the National Surety Company, 115 Broadway, where I am now engaged in most interesting and enjoyable work. At last I feel definitely placed. My work now consists of underwriting loans for mortgage guarantee purposes, and also studying conditions throughout the country affecting construction finance. Just recently the company sent me on a trip through North Carolina to make a survey of that state. Dick made a cruise to Tahiti this summer and a letter from him the other day stated that he is now chief of party on a survey in California. Met Blodgett the other day and found that he is studying as a bond salesman for Bonbright and Company. As you see, I'm making my residence in your home town. Haven't picked up any dirt about you yet." Lank's address is 199 Walnut St., Montclair, N. J.

Your Secretary is deeply grateful for the support rendered during the past month and sends up heartfelt prayers that it will continue. Needless to say, if the letters keep pouring in, in this manner, it will be impossible to answer them all personally. Their publication here in The Review will have to serve as acknowledgment.

JOHN D. FITCH, *Secretary*,
c/o Charles T. Main, 200 Devonshire St., Boston, Mass.

COURSE XIII

Another gentle but firm inquiry from Hal Donovan brings to light the following wanderings of our crew of thirteen. Jimmie Wong has strayed far from the fold and is now a resident of Belfast, Ireland, doing real shipbuilding work on several United Fruit ships under construction there.

Gubby Holt has settled in Little Old New York where he has more of a chance to use his cross-country training dodging taxies and other moving juggernauts. Near him is Frenchy Rosseau now doing time on land for the United American Lines. I understand they live very near each other on 94th Street, so look them up if you are there.

Sinbad Young has turned from the art of selling and again calls himself an engineer. When not doing special research work for the Norton Company of Worcester he teaches a class in commercial arithmetic. Oh! by the way, he still has the Buick.

Our wandering minstrel, Peggy Joyce, has returned to Worcester after a sojourn in Springfield and according to reports is successfully making that "Number Please" sound sweeter over the wire. His job is cut out for him, we'll say.

One of our members was given a splendid chance to go south for the winter but he said no, and I am not going to say why. You can ask El Thayer yourself. Guess Newport News is too far from Boston, the same as another of our members finds New York is much too far, so El is going to keep Fore River on the map. Speaking of Fore River, Warner Lumbard, '25, has just left there for Newport News and taken his valentine with him.

As for yours truly, married life is the only life. Never was so busy and so happy. I advise it for all who have found the right girl. Any one who is in Pawtucket look us up and see for yourself. Business still rushes on by the door while the Kwh's hum merrily out over the wire. Well, fellows, all the luck in the world to you.

G. FRED ASHWORTH, *Secretary*,
224 Broadway, Pawtucket, R. I.

1924 Continued

COURSE XIV

Having decreed elsewhere that this Course should be one of those to put in an appearance in this month's issue, I must live up to my own rules and put in that appearance. I knew I was going to have to do this and so I may have taken a little advantage over the other Course Secs in preparing for it. As a response to my perennial begging letter, or call it what you will, I have the sum total of four letters and a clipping to give the proper credit to. The clipping is small, concerning Tom Mattson and is a little bit aged, being dated August 15, but at that, it is a later date than I have received a letter from him. Get the hint, Tom? It is from the *Electrical World*, and notes that he was formerly under Dr. Millard's research staff and has now been appointed commercial heating engineer of the commercial and industrial division of Charles H. Tenney and Company. Among other duties, he will concentrate upon industrial electric heating problems and developments.

George Swift is still the confirmed bachelor he was. He is just as pleased with being single as Brownie is with being married. He intends to stay single and Brownie to stay married. Evidently he thinks all this talk about falling is to be taken literally. He is still with Professor Thompson, and this past summer he was working on electolytic iron, the most corrosive substance there is. It is so corrosive that the only thing which will hold it is concrete soaked in sulphur. It required a couple of weeks of night work and a new set of overalls and rubbers each week. Continuing with course news he tells me that Piroomoff is still with Professor MacAdams and others in the Chemical Engineering Department, that Tom Mattson is still with Tenney Service, that Duffy is still with the Edison and just as enthusiastic over electric heating apparatus. (I had the pleasure of hearing Professor Franklin in Hartford a little over a week ago in an excellent talk on Electrical Experiments and he likened electrical heating to a system of pumping water through a pipe system at a sufficiently high velocity to generate the necessary heat by friction. Believe me it did my heart good to hear one of my old professors and particularly Professor Franklin.) Norris, he says, is enjoying himself with an Ajax-Northrup high frequency furnace which behaves about the same as the one we worked on in the electrochem lab. — Henry Liebman has left the N. Y. Telephone Company. It was a very meaty letter, very welcome, and let me say right here that when you can get him to write, you feel more than repaid for your effort.

Al Cummings just at the present moment is doing work up near my old stamping grounds. A letter states that he is now at Iron Mountain which is eleven miles from Niagara, Wis., a place which I left just about a year ago this Christmas time. Mrs. Cummings is with him and although he felt some fear at first in taking her to some of the Michigan mining towns, he has been able to protect her against the big burly miners. Just now he wishes he were farther east.

Jack Walthall, in a letter, suggests that I should threaten not to put any notes in at all unless you fellows came across better. A good idea but I couldn't use it this month because as stated above I was duty bound to put something in. That is pretty near what does happen. When you fellows don't come across, I have no news to print and consequently you fellows get no news at all. When you respond about 50 per cent of what you should you get 50 per cent notes. In other words you get back just what you give to me. He likes the notes and I am certainly glad he does. Pleasing you fellows is all I am trying to do and when you are pleased, I am satisfied. But what a job it is, some of the time. The most interesting thing of late in Badin has been rain. To them it means work as they are entirely dependent upon water power. Hence with the coming of rain the plant began to run, the storekeepers began to smile, and every one was happy. Box 253 is his address now.

Bill Sturdy is the writer of the other letter and he at present is another one of the Course who is on location for his company. He has been sent to Chicago by the A. T. and T. Company on a trial installation of some apparatus which was developed in their laboratory. He has made a week-end (if he took a month he could go around the world) trip to the northwestern corner of Wyoming. The hunting was the main feature of the trip and although they didn't get a chance to shoot any deer, the jack rabbits were so plentiful that the horses almost stepped on them. The ranch was at an altitude of 6500 feet and from the top of some of the peaks he could look down upon the clouds. Plenty of snow on top but not much below. It seems to me that these traveling representatives like Bill and Al are having the time of their young lives seeing this big country while the rest of us just sit around home and listen.

In an account as complete as this one is I feel that I ought to stick

Professional Cards

A Directory of Technology Graduates and Other Qualified Engineers

1924 Continued

in my oar and give a little personal history. During the past two weeks my time to a considerable extent has been spent in writing to members of the Course, the Course Secretaries and taking care of my Christmas shopping. At the Travelers I have recently been transferred from one unit to another and my work now consists in making analyses of compensation risks which show a dangerous loss ratio from the point of view of the company.

HAROLD G. DONOVAN, *Secretary*,
80 Farmington Ave., Hartford, Conn.
THOMAS E. MATTSON, *Assistant Secretary*,
43 Riverdale St., Allston, Mass.

COURSE XV

Now comes the darkness of the New England winter, and the golden tinge of silence still shrouds the illustrious members of this course. Verily we are at great odds to know what to do. If, desperately, we are forced to fashion news out of clouds and imageries, the ever-present sword of libel suits trembles threateningly above our scanty locks. Possibly the devil of righteous anger were better to be faced than that sea of contempt into which we shall be cast if we please not the insatiable powers-that-be. But no, our accounts shall be truthful, albeit meagre — "de nihilo, nihil."

Gib Cowan visited us not so long ago. Gib, as you know, is with Lord and Taylor in New York City, likes it, and is making good. He has recently been placed in charge of training classes in department store work. — E. L. Quirin, who has been in New York with the E. A. Canalizo Company, has gone into statistical work with his brother, forming the firm of E. L. and H. A. Quirin. We wish him success in his new venture. — Phil Blanchard has the sincere sympathy of the course in the death of his father. — Sid Doyle has gone to Florida, presumably to loaf. He is in St. Augus ne with Jack Spaulding. — Duke Marrs, with the Dennison Company in Framingham, writes that on October 1 he was made assistant chief planning clerk of the crepe division at the plant.

Don Jennings moved from Montana to Arizona for the winter in order to obtain the benefit of a milder climate, which seemed desirable after his severe siege of pneumonia a year ago. At present he is helping on some prospecting work by churn drills for the Louis D'Or Copper Company at Globe, Arizona. He and his mother drove by automobile from Salt Lake City to Globe in three days and are now housed in their own quarters at the mine about ten miles from Globe.

Gordon Wayne is pretty well advanced on his trip through the mill of the U. S. Finishing Company of Pawtucket, R. I. At present he is in the silk dye house and has been dyeing rayon, celanese and silk.

JOHN O. HOLDEN, *Secretary*,
110 Monroe Road, Quincy, Mass.

'25

No notes have been received by The Review Editors from the Secretary of this Class for inclusion in the February issue. The Secretary received the usual notification that copy was due, accompanied by such news as had been compiled in The Review Office. Members of the Class having news or inquiries should address them to Charles R. Muhlenberg, Secretary, 22 East 38th Street, New York City.

THE MASSACHUSETTS INSTITUTE OF TECHNOLOGY

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To be admitted to the first year class, applicants must have attained the age of seventeen years, and must satisfactorily fulfill entrance requirements in Algebra, Plane and Solid Geometry, Trigonometry, Physics, Chemistry, English, History, and French or German and one elective subject. Examinations are required in all subjects except Chemistry, History and the elective, the requirements for which are fulfilled by the presentation of satisfactory certificates. A division of these entrance subjects between different examination periods is permitted.

Entrance examinations are held at the Institute in September. In June, applicants will be examined by the College Entrance Examination Board in Boston, New York, Philadelphia, Chicago and many other cities in America and Europe. A circular stating times and places is issued in advance by the College Board.

Graduates of colleges and scientific schools of collegiate grade, and in general all applicants presenting satisfactory certificates showing work done at another college corresponding to at least one year's work at the Institute, are admitted, without examination, to such advanced standing as is warranted by their previous training.

Graduate courses leading to the degrees of Master of Science, Master in Architecture, Doctor of Philosophy, Doctor of Science and Doctor of Public Health are also offered. Special research Laboratories of Physical Chemistry, Applied Chemistry and Science have been established.

Publications

The Institute publishes a number of bulletins designed to acquaint prospective students and others who may be interested with its requirements, facilities, instructional aims and subjects. These will be mailed gratis and post free upon request.

For general information, requirements for admission, brief description of courses, etc., ask for Bulletin A.

For schedules of courses and detailed description of subjects of instruction, ask for Bulletin B.

For the announcement of courses offered in the Summer Session, ask for Bulletin C.

For information on Advanced Study and Research, ask for Bulletin D.

For the report of the President and the Treasurer, ask for Bulletin E.

For a popularly written explanation of Engineering Course content, ask for Bulletin Y.

For these bulletins, or for any other information, address

THE TECHNOLOGY REVIEW BUREAU

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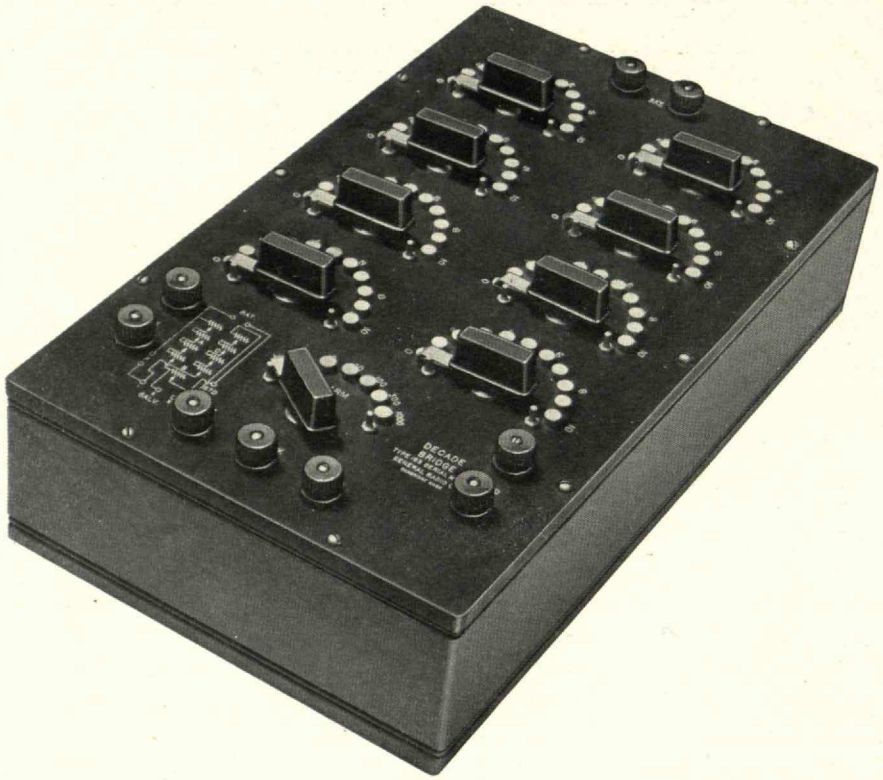

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